SOVIET JOURNAL OF NUCLEAR PHYSICS

Volume 17 July–December 1973

J. George Adashko, Editor

American Institute of Physics Translations Advisory Board
Robert T. Beyer, Chairman
J. George Adashko, Freeman Dyson, Dwight Gray
Morton Hamermesh, David Harker, Howard A. Robinson

a translation of the journal
ЯДЕРНАЯ ФИЗИКА
Yadernaya Fizika (Nuclear Physics) of the Academy of the Sciences of the USSR
Russian original Vol. 17, January–June 1973

Editorial Board
V. V. Vladimirskii, Editor in Chief
Ya. A. Smorodinskii, Associate Editor M. V. Terent'ev, Secretary
S. T. Belyaev, D. I. Blokhintsev, N. N. Bogolyubov, G. I. Budker, I. V. Chuvilo
A. S. Davydov, B. S. Dzhelepov, G. N. Flerov, I. M. Frank, V. G. Kirillov-Ugryumov
L. I. Lapidus, A. A. Logunov, M. G. Meshcheryakov, A. B. Migdal
M. I. Podgoretskii, B. M. Pontecorvo, R. M. Sulyaev
K. A. Ter-Martirosyan, S. N. Vernov, D. V. Volkov

published by the American Institute of Physics

This index is based on the 1974 *Physics and Astronomy Classification Scheme* developed by AIP. It is not a translation. It was produced by computer-aided photocomposition directly from the magnetic tapes of the AIP's Current Physics Information System. Suggestions for improvements as well as other comments are welcome and should be addressed to the Editor.

A new feature introduced in this index is the inclusion of microfilm reel and frame numbers for the convenience of those wishing to find articles in *Current Physics Microform* (CPM), the monthly microfilm edition of the complete set of journals of the American Institute of Physics. These numbers are given in the form **CPM-7201A0321**, where 72 refers to the year, 01 denotes the month (January in this example), A the cartridge (generally there are four cartridges every month: A,B,C,D), and 0321 the frame.

Soviet Journal of Nuclear Physics Vols. 17–18, Index, July 1973–June 1974
(Russian Original: Yadernaya Fizika, Vols. 17–18, January–December 1973)

Analytic subject index to volumes 17–18:

675 2 Mathematics, mathematical methods in physics
675 3 Classical and quantum mechanics
675 4 Relativity and gravitation
675 11 General field and particle theory
676 12 Specific theories and interaction models; particle systematics
677 13 Specific reactions and phenomenology
680 14 Properties of specific particles and resonances
680 21 Nuclear structure
682 23 Nuclear decay and radioactivity
682 24 Nuclear reactions and scattering, general
684 25 Nuclear reactions and scattering, specific reactions
686 27 Properties of specific nuclei listed by mass ranges
686 29 Experimental methods and instrumentation for elementary particle and nuclear physics
686 31 Atoms
686 41 Physics of gases
686 51 Structure of liquids and solids; crystallography
686 66 Magnetic resonance and relaxation in condensed matter; Mössbauer effect
686 71 Optics
686 87 Cosmic rays

688 **Author index to volumes 17–18**

SUBJECT INDEX TO VOLUMES 17-18

Papers are arranged in ascending page number order.

2. MATHEMATICS, MATHEMATICAL METHODS IN PHYSICS

Orthogonal transformations of multidimensional angular harmonics —Ya. A. Smorodinskiĭ and V. D. Éfros. 17(1), 107–13 (Jul. 1973); CPM-7312F0259

On the complete set of observables on a sphere in the three-dimensional complex space —I. Lukáč and L. Toth. 17(6), 696–700 (Dec. 1973); CPM-7408X0502

Estimate of the method of multidimensional harmonics with the aid of Green's functions —A. M. Gorbatov. 18(5), 524–8 (May 1974); CPM-7409X0634

3. CLASSICAL AND QUANTUM MECHANICS

Spectrum and polarization of synchrotron radiation in the case of strong radiation friction —D. V. Gal'tsov and V. A. Losev. 17(1), 57–8 (Jul. 1973); CPM-7312F0209

Proper oscillations of a classical chiral field —I. V. Andreev. 17(1), 96–7 (Jul. 1973); CPM-7312F0248

Bound quasinuclear states of the system 2N2$\bar{N}$ —E. S. Birger, B. O. Kerbikov, N. B. Konyukhova, and I. S. Shapiro. 17(1), 92–5 (Jul. 1973); CPM-7312F0244

Investigations of the WKB approximation within the framework of the exponential method —V. A. Kolkunov and V. N. Mel'nikov. 17(4), 452–7 (Oct. 1973); CPM-7407X0232

4. RELATIVITY AND GRAVITATION

Gravitation and the finite renormalization of the muon mass in quantum field theory —F. Kh. Abdullaev. 17(4), 450–1 (Oct. 1973); CPM-7407X0230

11. GENERAL FIELD AND PARTICLE THEORY

11.10.– Field theory

The equivalence theorem and gauge invariance in renormalizable theories —R. E. Kallosh and I. V. Tyutin. 17(1), 98–106 (Jul. 1973); CPM-7312F0250

Separation of variables in the Bethe–Salpeter equation in Minkowski space —Í. A. Verdiev. 17(3), 334–40 (Sep. 1973); CPM-7406X0884

Gravitation and the finite renormalization of the muon mass in quantum field theory —F. Kh. Abdullaev. 17(4), 450–1 (Oct. 1973); CPM-7407X0230

Some physical consequences of a nonlocal quantum theory of weak interaction —V. A. Alebastrov, G. V. Efimov, and Sh. Z. Sel'tser. 18(1), 109–13 (Jan. 1974); CPM-7405F0323

Renormalizable models of the weak interaction and the neutral scalar meson —E. B. Bogomol'. 18(3), 297–301 (Mar. 1974); CPM-7409X0055

Quasistationary levels in the lower continuum —V. S. Popov and V. D. Mur. 18(3), 350–6 (Mar. 1974); CPM-7409X0108

11.20.– S-matrix theory

The equivalence theorem and gauge invariance in renormalizable theories —R. E. Kallosh and I. V. Tyutin. 17(1), 98–106 (Jul. 1973); CPM-7312F0250

Asymptotic behavior of the scattering-amplitude phase shift —S. Yu. Medvedev. 18(4), 478–82 (Apr. 1974); CPM-7409X0414

Approximating the S matrix by means of rational functions —V. V. Malyarov and M. N. Popushoĭ. 18(5), 586–8 (May 1974); CPM-7409X0696

11.30.– Symmetry and conservation laws

Electromagnetic interaction in SU(3) ×SU(3) symmetry and pseudoscalar meson decays —B. M. Zupnik and E. A. Ivanov. 17 (3), 301–6 (Sep. 1973); CPM-7406X0851

The conservation of lepton charge —M. G. Shchepkin. 17(4), 428–32 (Oct. 1973); CPM-7407X0208

The nonlinear theory of neutral kaons —I. S. Shapiro. 17(4), 445–9 (Oct. 1973); CPM-7407X0225

On the complete set of observables on a sphere in the three-dimensional complex space —I. Lukáč and L. Toth. 17(6), 696–700 (Dec. 1973); CPM-7408X0502

Mass formula in SU(3) symmetry with elliptical basis —I. Lukáč. 18 (1), 105–8 (Jan. 1974); CPM-7405F0319

"Extra" Goldstones in gauge theory with spontaneous breaking —I. V. Tyutin and E. S. Fradkin. 18(1), 114–8 (Jan. 1974); CPM-7405F0328

Scalar and pseudoscalar mesons in broken nonlinear chiral SU(3) ⊗SU(3) dynamics —Yu. M. Il'in and V. Ya. Sabo. 18(2), 238–40 (Feb. 1974); CPM-7407X0120

Divergences in isotopic mass differences of hadrons and spontaneous breaking of isospin symmetry —A. B. Kaganovich. 18(2), 241 (Feb. 1974); CPM-7407X0123

Matrix elements of the boost for the reduction O(3,1) O(2,1) O(2) —Ya. A. Smorodinskiĭ and G. I. Shepelev. 18(4), 483–6 (Apr. 1974); CPM-7409X0419

Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 631–2 (Jun. 1974); CPM-7409X0465

11.40.– Currents and their properties

Scale dimensionality of the axial current and the $\sigma\pi\pi$ vertex —Dao Vong Duc. 18(1), 99–101 (Jan. 1974); CPM-7405F0313

Sign of muon charge asymmetry in the reaction $e^-e^+ \to \mu^-\mu^+$ and models of unified electromagnetic–weak interaction —É. M. Lipmanov and N. V. Mikheev. 18(2), 199–200 (Feb. 1974); CPM-7407X0081

Consequences from microcausality for the electroproduction process —B. V. Geshkenbein and A. I. Komech. 18(4), 473–7 (Apr. 1974); CPM-7409X0409

Slopes of π-meson spectra in $k \to 3\pi$ decays —A. A. Kapustnikov. 18 (6), 664–6 (Jun. 1974); CPM-7409X0498

11.50.– Dispersion relations and sum rules

An analysis of the Kπ interaction up to 1 GeV —P. S. Isaev and V. I. Khleskov. 17(1), 84–7 (Jul. 1973); CPM-7312F0236

An investigation of the reactions $\gamma\gamma \to K\bar{K}$ and $\gamma\gamma \to \gamma\gamma$ by means of the dispersion relations —P. S. Isaev and V. I. Khleskov. 17(2), 188–90 (Aug. 1973); CPM-7406X0738

Effect of exchange forces on the sum rule for electron scattering by nuclei —E. V. Inopin and S. N. Roshchupkin. 17(5), 526–7 (Nov. 1973); CPM-7407X1110

Continuous moment sum rules —Z. R. Babaev and V. S. Zamiralov. 17(5), 576–8 (Nov. 1973); CPM-7407X1160

Dispersion sum rules and vector form factors of the weak $N \to \Delta$ transition —I. V. Krive. 17(6), 664–6 (Dec. 1973); CPM-7408X0470

Sum rules for inclusive cross sections and correlation function with account of multipomeron exchanges —V. Kh. Sholkhet. 18(3), 302–7 (Mar. 1974); CPM-7409X0060

11.60.– Complex angular momemtum

Production of particles with large transverse momenta at high energies —D. I. D'yakonov. 17(1), 73–7 (Jul. 1973); CPM-7312F0225

Copyright © 1974 American Institute of Physics

Large-angle scattering in the "DAMA" model —A. I. Bugrii, L. L. Jenkovszky, and N. A. Kobylinskii. 17(3), 319–21 (Sep. 1973); CPM-7406X0869
Elastic πN scattering and backward charge exchange with allowance for the cut contribution —K. G. Boreskov, K. A. Ter-Martirosyan, and I. S. Tsukerman. 17(4), 442–4 (Oct. 1973); CPM-7407X0222
Character of inclusive spectra and fluctuations produced in inelastic processes by multipomeron exchange —V. A. Abramovskiĭ, V. N. Gribov, and O. V. Kancheli. 18(3), 308–17 (Mar. 1974); CPM-7409X0066
On hadron production in the virtual-photon fragmentation region — A. A. Ansel'm and D. I. D'yakonov. 18(5), 565–9 (May 1974); CPM-7409X0675

11.80.– Relativistic scattering theory

Mean multiplicities of secondaries in hadron–hadron collisions —V. G. Grishin. 17(1), 70–2 (Jul. 1973); CPM-7312F0222
Spin effects in the theory of pHe⁴ scattering —G. I. Lykasov and A. V. Tarasov. 17(2), 153–6 (Aug. 1973); CPM-7406X0703
Spin effects in elastic scattering at angles near 180° —A. A. Arkhipov, V. K. Belov, and V. I. Savrin. 17(5), 579–82 (Nov. 1973); CPM-7407X1163
Method of smoothly varying angular functions in the three-body problem —N. N. Beloozerov. 17(6), 605–8 (Dec. 1973); CPM-7408X0411
Role of nucleons in high-energy collisions —I. F. Ginzburg. 18(2), 217–9 (Feb. 1974); CPM-7407X0099
Multiple production and interference of particles emitted by moving sources —G. I. Kopylov and M. I. Podgoretskiĭ. 18(3), 336–41 (Mar. 1974); CPM-7409X0094

11.80.C Kinematic

Critical charge for colliding nuclei —V. S. Popov. 17(3), 322–8 (Sep. 1973); CPM-7406X0872
States of low energy in a two-particle system in a field —A. M. Dyugaev. 17(3), 329–33 (Sep. 1973); CPM-7406X0879
Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskii, and M. I. Yatsuta. 18(1), 41–4 (Jan. 1974); CPM-7405F0255
Particle polarization in inclusive reactions —V. A. Kudryavtsev and E. M. Levin. 18(2), 232–7 (Feb. 1974); CPM-7407X0114

11.80.E Partial-wave analysis

ρ dominance and bootstrap of the ππ system —A. N. Vall, V. S. Dedushev, and V. V. Serebryakov. 17(1), 66–9 (Jul. 1973); CPM-7312F0218
An analysis of the Kπ interaction up to 1 GeV —P. S. Isaev and V. I. Khleskov. 17(1), 84–7 (Jul. 1973); CPM-7312F0236
The Bethe phase-shift and measurement of the Ref/Imf ratio in high-energy scattering by protons and deuterons —V. B. Kopeliovich. 18(2), 210–3 (Feb. 1974); CPM-7407X0092
Asymptotic behavior of the scattering-amplitude phase shift —S. Yu. Medvedev. 18(4), 478–82 (Apr. 1974); CPM-7409X0414
Pion–deuteron scattering at moderate energies with allowance for the particle spins —V. A. Karmanov. 18(6), 621–5 (Jun. 1974); CPM-7409X0455

11.80.G Multichannel scattering

Monotonic dependence of the K-matrix on the potential in Kohn's variational method —R. K. Peterkop. 17(4), 458–60 (Oct. 1973); CPM-7407X0238
Accuracy of the pole approximation in the four-particle integral equations —I. M. Narodetskiĭ. 18(1), 35–7 (Jan. 1974); CPM-7405F0249
Equations for three-particle resonance wave function —Yu. A. Simonov and A. M. Badalyan. 18(1), 38–40 (Jan. 1974); CPM-7405F0252
The asymptotic amplitude regarded as a result of summing resonances in the crossing channel —V. A. Tsarev. 18(2), 220–2 (Feb. 1974); CPM-7407X0102

11.80.J Many-body scattering and Faddeev equation

Production of particles with large transverse momenta at high energies —D. I. D'yakonov. 17(1), 73–7 (Jul. 1973); CPM-7312F0225
Asymptotic behavior of the wave function for three particles —A. M. Badalyan and Yu. A. Simonov. 17(2), 225–31 (Aug. 1973); CPM-7406X0775
Comments on the K-harmonics method in the three body nuclear problem —V. D. Efros. 17(5), 517–22 (Nov. 1973); CPM-7407X1101
Pion–deuteron scattering at energies near the Δ resonance and isobar–nucleon interaction —V. A. Karmanov. 17(6), 626–9 (Dec. 1973); CPM-7408X0432
Integral equations for four nucleons with account of spin and isospin —I. M. Narodetskiĭ and I. L. Grach. 18(3), 342–9 (Mar. 1974); CPM-7409X0100
Approximate methods for the solution of the three–nucleon problem at positive energies —V. B. Belyaev, V. N. Efimov, E. G. Tkachenko[1], and H. Schulz. 18(4), 401–4 (Apr. 1974); CPM-7409X0337
Effect of the finite πN–interaction radius on the πd–scattering length —N. M. Petrov and V. V. Peresypkin. 18(4), 407–8 (Apr. 1974); CPM-7409X0343

11.80.L Multiple scattering

Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. 18(2), 179–81 (Feb. 1974); CPM-7407X0061
Allowance of multiple scattering in scattering and photoproduction of pions on deuterons —V. B. Senyushkin. 18(3), 270–5 (Mar. 1974); CPM-7409X0028
Elastic pHe³ scattering in the Glauber model with spin —G. I. Lykasov and A. V. Tarasov. 18(6), 619–20 (Jun. 1974); CPM-7409X0453
Correlations of identical pions in multiple production reactions —É. V. Shuryak. 18(6), 667–70 (Jun. 1974); CPM-7409X0501

12. SPECIFIC THEORIES AND INTERACTION MODELS; PARTICLE SYSTEMATICS

12.20.– Electromagnetic and unified gauge fields

12.20.D Specific calculations and limits of QED

An investigation of the reactions γγ→KK̄ and γγ→γγ by means of the dispersion relations —P. S. Isaev and V. I. Khleskov. 17(2), 188–90 (Aug. 1973); CPM-7406X0738
The vector parameter and the calculation of the matrix elements in electrodynamics —F. I. Fedorov. 17(4), 461–4 (Oct. 1973); CPM-7407X0241
Scattering of light by a charge in an external electromagnetic field — E. V. Doktorov, I. A. Malkin, and V. I. Man'ko. 18(1), 74–8 (Jan. 1974); CPM-7405F0288

12.20.H Unified field theories and models

The introduction of additional gauge fields into the Weinberg model —A. D. Dolgov, V. I. Zakharov, and L. B. Okun'. 18(4), 452–9 (Apr. 1974); CPM-7409X0388
The ambiguity in the anomalous magnetic moment of the muon in gauge-invariant theories —A. N. Ivanov. 18(6), 658–63 (Jun. 1974); CPM-7409X0492
The possible existence of a finite charge in quantum field theory —G. M. Avdeeva, A. A. Belavin, and A. P. Protogenov. 18(6), 671–4 (Jun. 1974); CPM-7409X0505

12.30.– Models of weak interactions

One-particle exchange models for weak leptonic interactions. leptonic processes —N. A. Guliev and I. G. Dzhafarov. 17(3), 293–7 (Sep. 1973); CPM-7406X0843
Electromagnetic interaction in SU(3) ×SU(3) symmetry and pseudoscalar meson decays —B. M. Zupnik and E. A. Ivanov. 17 (3), 301–6 (Sep. 1973); CPM-7406X0851
Some physical consequences of a nonlocal quantum theory of weak interaction —V. A. Alebastrov, G. V. Efimov, and Sh. Z. Sel'tser. 18(1), 109–13 (Jan. 1974); CPM-7405F0323

12.30.E Intermediate boson

Influence of intermediate boson on the angular and energy distributions of the muons in the reaction $\nu_\mu + Z \to Z + \nu_\mu + \mu^+ + \mu^-$ —M. G. Shchepkin. 17(1), 59–61 (Jul. 1973); CPM-7312F0211
Intermediate-particle production in the renormalizable theory of the weak interaction —A. É. Asratyan and E. P. Shabalin. 18(1), 87–9 (Jan. 1974); CPM-7405F0301
Regularization of weak interactions with W bosons by means of nonpolynomial Lagrangians —F. Kh. Abdullaev. 18(3), 333–5 (Mar. 1974); CPM-7409X0091

12.30.G Composite models

Renormalizable models of the weak interaction and the neutral scalar meson —E. B. Bogomol'. 18(3), 297–301 (Mar. 1974); CPM-7409X0055
Cancellation of divergences and gauge invariance in the massive Yang–Mills field theory —A. N. Ivanov and V. M. Shekhter. 18 (3), 324–32 (Mar. 1974); CPM-7409X0082

12.40.– Models of strong interactions

Critical charge for colliding nuclei —V. S. Popov. 17(3), 322–8 (Sep. 1973); CPM-7406X0872

12.40.D Composite models of hadrons

Properties of the Pomeranchuk pole, diffraction scattering, and the asymptotic equality of the total cross sections —V. N. Gribov. 17 (3), 313–8 (Sep. 1973); CPM-7406X0863
The average multiplicities of particles in the quark model —V. V. Anisovich, M. N. Kobrinskiĭ, A. K. Likhoded, and V. M. Shekhter. 17(3), 343–4 (Sep. 1973); CPM-7406X0893
Inclusive hadron photoproduction in the quark model —M. N. Kobrinskiĭ. 18(1), 93–4 (Jan. 1974); CPM-7405F0307
Quark parton model and a possibility of detecting the W boson in high-energy nucleon–nucleon collisions —Yu. A. Golubkov, A. A. Ivanilov, Yu. P. Nikitin, and G. V. Rozhnov. 18(2), 203–7 (Feb. 1974); CPM-7407X0085
On the analysis of the reaction $\pi^- p \to \pi^0 n$ at high energies —Z. R. Babaev, V. S. Zamiralov, and S. V. Tarasevich. 18(2), 214–6 (Feb. 1974); CPM-7407X0096
Shadow corrections with account of inelastic screening and calculation of the total cross sections for pn, $\bar{p}n$, and K*n collisions —V. V. Anisovich and D. A. Stoyanova. 18(2), 230–1 (Feb. 1974); CPM-7407X0112
Sum rules for inclusive cross sections and correlation function with account of multipomeron exchanges —V. Kh. Shoikhet. 18(3), 302–7 (Mar. 1974); CPM-7409X0060
Character of inclusive spectra and fluctuations produced in inelastic processes by multipomeron exchange —V. A. Abramovskiĭ, V. N. Gribov, and O. V. Kancheli. 18(3), 308–17 (Mar. 1974); CPM-7409X0066
Is the symmetry of the quark model SU(6) or U(6) ? —V. V. Anisovich and V. M. Shekhter. 18(3), 359–60 (Mar. 1974); CPM-7409X0117
Effect of polarization on inclusive hadron spectra —M. N. Kobrinskiĭ and A. K. Likhoded. 18(4), 460–1 (Apr. 1974); CPM-7409X0396
On hadron production in the virtual-photon fragmentation region —A. A. Ansel'm and D. I. D'yakonov. 18(5), 565–9 (May 1974); CPM-7409X0675

12.40.H Duality and dual models

Dual model without tachyons, having a Virasoro symmetry, and simplest loop diagrams —M. V. Loktionov and M. M. Nesterov. 17(1), 78–83 (Jul. 1973); CPM-7312F0230
Pomeranchuk cuts in the dual resonance model and total cross sections at high energies —L. V. Laperashvili and M. G. Safro. 17 (2), 216–20 (Aug. 1973); CPM-7406X0766
"Quarks" in dual models —I. T. Dyatlov. 17(5), 563–5 (Nov. 1973); CPM-7407X1147
Construction of factorizable dual amplitudes on the basis of classical group representations by functions of several complex variables — S. N. Manida and V. A. Franke. 18(3), 321–3 (Mar. 1974); CPM-7409X0079
Vacuum state in dual models —D. V. Volkov, A. A. Zheltukhin, and A. I. Pashnev. 18(4), 467–72 (Apr. 1974); CPM-7409X0403
DAMA single-particle distributions —L. L. Jenkovszky, N. A. Kobylinskiĭ, and E. S. Martynov. 18(5), 573–6 (May 1974); CPM-7409X0683
Statistical and dynamical properties of dual resonances —M. I. Gorenshteĭn, G. M. Zinov'ev, V. A. Miranskiĭ, B. V. Struminskiĭ, and V. P. Shelest. 18(5), 577–82 (May 1974); CPM-7409X0687

12.40.M Complex angular momentum plane

Possible spin effects in pp scattering at high energies and the $X^0(960)$ meson —A. Buyak, A. N. Zaslavskiĭ[1)], V. I. Ogievetskiĭ, and A. T. Filippov. 18(4), 462–4 (Apr. 1974); CPM-7409X0398

12.40.P Absorptive, optical, and statistical models

Approximate allowance for absorptive corrections to binary hadronic reactions and the Coulomb photoproduction —I. V. Andreev and A. Ya. Ostapchuk. 18(1), 95–8 (Jan. 1974); CPM-7405F0309

12.40.R Peripheral models (one-particle exchange)

Coupling constant in the peripheral model for the reaction (d, p) with allowance for the vertex form factor —Yu. V. Orlov. 18(3), 357–8 (Mar. 1974); CPM-7409X0115
Formation of heavy clusters and properties of topological cross sections of proton–proton interactions —Zh. S. Takibaev and P. A. Usik. 18(4), 465–6 (Apr. 1974); CPM-7409X0401
Peripheral-model analysis of (p,d) reactions with allowance for the nuclear form factor —Yu. V. Orlov. 18(5), 529–31 (May 1974); CPM-7409X0639

12.40.S Many-particle-exchange models

The possibility of a constant total cross section in multiperipheral models —E. M. Levin and M. G. Ryskin. 17(2), 199–207 (Aug. 1973); CPM-7406X0749
Multiperipheral theory of the interaction of hadrons at high energies: the $\pi\pi$ interaction —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roĭzen, and D. S. Chernavskiĭ. 17(2), 208–15 (Aug. 1973); CPM-7406X0758
Asymptotic behavior of the cross section with T = 1 in the multiperipheral model —E. M. Levin and M. G. Ryskin. 18(2), 223–5 (Feb. 1974); CPM-7407X0105
Multiperipheral theory of particle interaction at high energies. πN and NN interactions —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roĭzen, and D. S. Chernavskiĭ. 18(2), 226–9 (Feb. 1974); CPM-7407X0108
Similarity of properties of photons and pions and production of pions with large transverse momenta —I. M. Dremin. 18(3), 318–20 (Mar. 1974); CPM-7409X0076
Energy spectrum of three resonantly interacting particles —A. M. Dyugaev. 18(4), 405–6 (Apr. 1974); CPM-7409X0341
Production of particles with large transverse momenta in the pionization region —E. M. Levin and M. G. Ryskin. 18(5), 570–2 (May 1974); CPM-7409X0680

12.40.V Vector-meson dominance

Weak-interaction effects in inclusive reactions at high energies —N. N. Nikolaev. 17(1), 62–5 (Jul. 1973); CPM-7312F0214
ρ dominance and bootstrap of the $\pi\pi$ system —A. N. Vall, V. S. Dedushev, and V. V. Serebryakov. 17(1), 66–9 (Jul. 1973); CPM-7312F0218

13. SPECIFIC REACTIONS AND PHENOMENOLOGY

13.10.+ Weak and electromagnetic interactions of leptons

Resonance absorption of neutrinos in crystals —V. N. Andryushin. 17 (2), 171–3 (Aug. 1973); CPM-7406X0721
Charge asymmetry of the angular distribution of muons in the process $e^+e^- \to \mu^+\mu^-$ —I. B. Khriplovich. 17(3), 298–300 (Sep. 1973); CPM-7406X0848
Direct $\mu^+\mu^-$; and $e^+\mu m^-$ pair production in a neutrino beam —V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov, and A. A. Sokolov. 17(4), 420–2 (Oct. 1973); CPM-7407X0200

Possibilities of studying inelastic $\bar{\nu}_e e$ scattering reactions with high energy neutrino beams —V. N. Folomeshkin and M. Yu. Khlopov. 17(4), 423–4 (Oct. 1973); CPM-7407X0203

Cross sections of inelastic weak processes in lepton–lepton colliding beams —E. B. Bogomol'nyĭ, N. N. Nikolaev, and V. A. Novikov. 17(4), 425–7 (Oct. 1973); CPM-7407X0205

ABFST model for the inclusive reactions $ee \to eeX$ and $ee \to e\nu X$ —V. V. Skobelev. 17(6), 654–8 (Dec. 1973); CPM-7408X0460

Single muon production in colliding electron–positron beams —O. P. Sushkov and V. V. Flambaum. 18(1), 82–3 (Jan. 1974); CPM-7405F0296

Sign of muon charge asymmetry in the reaction $e^-e^+ \to \mu^-\mu^+$ and models of unified electromagnetic–weak interaction —É. M. Lipmanov and N. V. Mikheev. 18(2), 199–200 (Feb. 1974); CPM-7407X0081

Angular distribution of photon brehmsstrahlung in collision of ultrarelativistic electrons —V. S. Fadin and V. A. Khoze. 18(3), 289–94 (Mar. 1974); CPM-7409X0047

High–energy behavior of total cross sections for e^+e^- scattering and the Lamb shift —E. A. Kuraev, L. N. Lipatov, and N. P. Merenkov. 18(5), 554–61 (May 1974); CPM-7409X0664

Identity of final–state electrons in pair production in colliding e^+e^- beams —E. A. Kuraev, L. N. Lipatov, and M. I. Strikman. 18(6), 652–7 (Jun. 1974); CPM-7409X0486

13.20.– Leptonic decays of mesons

The $\mu \to e + \gamma$ decay in the gribov–Pontecorvo model —M. G. Shchepkin. 18(1), 79–81 (Jan. 1974); CPM-7405F0293

On the $\pi^0 \to e + \bar{e}$ decay —T. S. Romanova and I. S. Satsunkevich. 18(2), 198 (Feb. 1974); CPM-7407X0080

The branching ratio $\Gamma(\pi \to e\nu)/\Gamma(\pi \to \mu\nu)$ with account of electromagnetic corrections and the contribution from strong interactions —M. V. Terent'ev. 18(4), 449–51 (Apr. 1974); CPM-7409X0385

Search for $\bar{K}_3 \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 633–4 (Jun. 1974); CPM-7409X0467

13.25.– Hadronic decays of mesons

Search for a new vector meson in K_L^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. 18(4), 424–5 (Apr. 1974); CPM-7409X0360

Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 631–2 (Jun. 1974); CPM-7409X0465

Slopes of π–meson spectra in $k \to 3\pi$ decays —A. A. Kapustnikov. 18(6), 664–6 (Jun. 1974); CPM-7409X0498

13.40.– Electromagnetic processes and properties of hadrons

13.40.F Electromagnetic form factors; electric and magnetic moments

Heavy ρ mesons and the pion electromagnetic form factor —Yu. P. Shcherbin. 17(2), 183–7 (Aug. 1973); CPM-7406X0733

Inelastic electromagnetic form factors of K^{39} and Ca^{40} —V. G. Vlasenko, N. G. Afanas'ev, V. A. Gol'dshtein , S. V. Dementiĭ, E. L. Kuplennikov, V. I. Ogurtsov, and V. I. Startsev. 17(6), 585 (Dec. 1973); CPM-7408X0391

Determination of the deuteron form factor from the experimental data on elastic pd, pp, and np small–angle scattering in the energy range 10–26 GeV —L. S. Zolin, V. A. Nikitin, Truong Bien, and M. G. Shafranova. 18(1), 30–2 (Jan. 1974); CPM-7405F0244

Measurement of the pion and nucleon form factors at the Timelike four–momentum Transfers $k^2 = 1.7$, 2.2, and 2.9 F^{-2} —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 18(1), 53–6 (Jan. 1974); CPM-7405F0267

Determination of the form factor for the $\gamma p \Delta^+_{1236}$ vertex at momentum transfers up to 0.4 $(GeV/c)^2$ —Yu. I. Titov, N. F. Severin, and R. V. Akhmerov. 18(3), 276–8 (Mar. 1974); CPM-7409X0034

13.40.K Electromagnetic corrections to strong– and weak–interaction processes

Differences between the total cross sections at momenta up to 65 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. 17(2), 157–65 (Aug. 1973); CPM-7406X0707

Is the K^+–K^0 meson mass difference of pure electromagnetic origin? —L. S. Molchatskiĭ. 18(3), 295–6 (Mar. 1974); CPM-7409X0053

13.50.+ Compton scattering and lepton scattering by hadrons

Influence of intermediate boson on the angular and energy distributions of the muons in the reaction $\nu_\mu + Z \to Z + \nu_\mu + \mu^+ + \mu^-$ —M. G. Shchepkin. 17(1), 59–61 (Jul. 1973); CPM-7312F0211

Contribution to the theory of the internal Compton effect —E. G. Drukarev. 17(2), 174–9 (Aug. 1973); CPM-7406X0724

Amplitude of the Compton scattering by electrons with allowance for radiative corrections —G. V. Frolov. 17(2), 180–2 (Aug. 1973); CPM-7406X0730

Retardation in elastic photon scattering by hydrogen atoms —Ya. I. Granovskiĭ and V. I. Nechet. 18(2), 197 (Feb. 1974); CPM-7407X0079

13.60.– Hadron photo– and lepto–production

High–energy contributions to the dispersion integrals, the isotensor electromagnetic current and the data on $\pi^\pm$ photoproduction from threshold to 450 MeV —I. G. Aznauryan and A. N. Zaslavskiĭ. 17(2), 191–5 (Aug. 1973); CPM-7406X0741

Photoproduction of A_2 mesons at high energies —S. G. Matinyan and Yu. G. Shakhnazaryan. 17(2), 196–8 (Aug. 1973); CPM-7406X0746

Electroproduction of π^-–mesic atoms —V. F. Dmitriev. 17(4), 417–9 (Oct. 1973); CPM-7407X0197

Electroproduction of pions on nucleons in the model of current algebra with hard pions —G. M. Radutskiĭ and V. A. Serdyutskiĭ. 17(5), 540–4 (Nov. 1973); CPM-7407X1124

Leptonic production of scalar W meson at ultrahigh energies —V. M. Pyzh. 17(5), 555–7 (Nov. 1973); CPM-7407X1139

Cross sections of the deep inelastic processes $\nu + p \to l^- + l^+ + l^- +$ hadrons —E. V. Bugaev, V. I. Gurentsov, G. V. Domogatskiĭ, and I. M. Zheleznykh. 17(5), 558–60 (Nov. 1973); CPM-7407X1142

Consequences from microcausality for the electroproduction process —B. V. Geshkenbein and A. I. Komech. 18(4), 473–7 (Apr. 1974); CPM-7409X0409

13.70.– Hadron–induced low and intermediate energy reactions and scattering, energy 1 GeV

13.70.C Nucleon–nucleon, including antinucleon, deuteron, etc.

Single hyperon production in pN collisions at low energies —V. B. Kopeliovich. 18(1), 90–2 (Jan. 1974); CPM-7405F0304

A possible approximation of the experimental data on the secondary pion energies in nn collisions in c.m.s. —M. I. Keropyan and É. A. Mamidzhanyan. 18(2), 195–6 (Feb. 1974); CPM-7407X0077

Shadow corrections with account of inelastic screening and calculation of the total cross sections for pn, $\bar{p}n$, and K^+n collisions —V. V. Anisovich and D. A. Stoyanova. 18(2), 230–1 (Feb. 1974); CPM-7407X0112

Approximate methods for the solution of the three–nucleon problem at positive energies —V. B. Belyaev, V. N. Efimov, E. G. Tkachenko[1], and H. Schulz. 18(4), 401–4 (Apr. 1974); CPM-7409X0337

13.70.E Hyperon–nucleon

The $\Delta N \to NN$ interaction —V. A. Karmanov, L. A. Kondratyuk, G. A. Leksin, and F. M. Khasanov. 18(5), 583–5 (May 1974); CPM-7409X0693

13.70.G Pion–baryon

Amplitude of pion–deuteron scattering in the region of the Δ (1236) resonance energy —V. M. Kolybasov and A. E. Kudryavtsev. 17 (1), 22–6 (Jul. 1973); CPM-7312F0174

Isospin analysis of inelastic pion–nucleon scattering in the energy interval 300–500 MeV —M. M. Makarov, G. Z. Obrant, and V. V. Sarantsev. 17(1), 88–91 (Jul. 1973); CPM-7312F0240

The incoherent process $\pi^- + A \to 2\pi^- \pi^+ + A^*$. reaction with quasifree neutrons in the nucleus —V. P. Protasov and F. M. Sergeev. 17(5), 484–8 (Nov. 1973); CPM-7407X1068

Backward πN scattering and the possible existence of an elementary nucleon —I. F. Ginzburg and L. I. Perlovskiĭ. 17(6), 675–6 (Dec. 1973); CPM-7408X0481

The Bethe phase-shift and measurement of the Ref/Imf ratio in high-energy scattering by protons and deuterons —V. B. Kopeliovich. 18(2), 210–3 (Feb. 1974); CPM-7407X0092

On the analysis of the reaction $\pi^- p \to \pi^0 n$ at high energies —Z. R. Babaev, V. S. Zamiralov, and S. V. Tarasevich. 18(2), 214–6 (Feb. 1974); CPM-7407X0096

Effect of the finite πN–interaction radius on the πd–scattering length —N. M. Petrov and V. V. Peresypkin. 18(4), 407–8 (Apr. 1974); CPM-7409X0343

The reaction $\pi^- p \to \pi^+ \pi^- n$ near threshold —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, V. S. Kurbatov, V. M. Sidorov, and V. A. Yarba. 18(4), 426–9 (Apr. 1974); CPM-7409X0362

Pion–deuteron scattering at moderate energies with allowance for the particle spins —V. A. Karmanov. 18(6), 621–5 (Jun. 1974); CPM-7409X0455

13.70.J Kaon–baryon

Shadow corrections with account of inelastic screening and calculation of the total cross sections for pn, p̄n, and K⁺n collisions —V. V. Anisovich and D. A. Stoyanova. 18(2), 230–1 (Feb. 1974); CPM-7407X0112

13.70.L Meson–meson

ρ dominance and bootstrap of the ππ system —A. N. Vall, V. S. Dedushev, and V. V. Serebryakov. 17(1), 66–9 (Jul. 1973); CPM-7312F0218

An analysis of the Kπ interaction up to 1 GeV —P. S. Isaev and V. I. Khleskov. 17(1), 84–7 (Jul. 1973); CPM-7312F0236

3πγ interaction in the inelastic scattering of pions by heavy nuclei — G. S. Iroshnikov and L. P. Kotova. 17(5), 545–8 (Nov. 1973); CPM-7407X1129

Determination of the ππ scattering length a_0 from the analysis of experimental data on τ decay —S. A. Bunyatov, G. R. Gulkanyan, and V. S. Kurbatov. 17(6), 681–2 (Dec. 1973); CPM-7408X0487

13.80.– High– and super–high–energy interactions, energy 1 GeV

Elastic pd scattering at 5 GeV in the coulomb–nuclear interference region —Z. M. Zlatanov, L. G. Kristov, and P. A. Devenski. 17(1), 49–50 (Jul. 1973); CPM-7312F0201

Weak–interaction effects in inclusive reactions at high energies —N. N. Nikolaev. 17(1), 62–5 (Jul. 1973); CPM-7312F0214

Circular polarization of γ quanta in the reaction $n + p \to d + \gamma$ and the weak P–odd NNρ vertex —G. S. Danilov. 17(5), 549–54 (Nov. 1973); CPM-7407X1133

Leptonic production of scalar W meson at ultrahigh energies —V. M. Pyzh. 17(5), 555–7 (Nov. 1973); CPM-7407X1139

Spin effects in the production of quasinuclear mesons by a pole mechanism —I. Ots. 17(5), 561–2 (Nov. 1973); CPM-7407X1145

Properties of the proton and pion spectra for high–energy pp and πp interactions —Yu. I. Arestov, A. M. Moiseev, and K. A. Ter–Martirosyan. 17(5), 574–5 (Nov. 1973); CPM-7407X1158

The role of the core in formation of real nuclei —A. M. Gorbatov. 17 (6), 614–9 (Dec. 1973); CPM-7408X0420

Theoretical approach to elastic pd scattering at large angles —V. M. Kolybasov and N. Ya. Smorodinskaya. 17(6), 630–5 (Dec. 1973); CPM-7408X0436

Real part of the spinless pp–scattering amplitude at zero angle from 0.135 to 1.700 BeV/c —I. V. Amirkhanov, V. M. Bystritskiĭ, L. S. Vertogradov, R. Ya. Zul:karneev, R. Kh. Kutuev, Kh. Murtazaev, V. S. Nadezhdin, and V. I. Satarov. 17(6), 636–7 (Dec. 1973); CPM-7408X0442

Measurement of the $K^- p \to \bar{K}^0 n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. 17(6), 638–40 (Dec. 1973); CPM-7408X0444

The energy spectrum of γ rays produced in the internal target of the 70–BeV proton synchrotron —A. F. Dunaitsev, Yu. I. Ivan'shin, D. B. Kakauridze, I. I. Karpov, A. N. Mestvirishvili, B. A. Morozov, A. I. Saraĭkin, and A. A. Tyapkin. 17(6), 641–3 (Dec. 1973); CPM-7408X0447

The NN and πN interaction radii —V. S. Stavinskiĭ. 17(6), 677–8 (Dec. 1973); CPM-7408X0483

Semi–phenomenological equations for the shadow corrections for high–energy particle–deuteron interactions —V. V. Anisovich. 17 (6), 679–80 (Dec. 1973); CPM-7408X0485

Determination of the deuteron form factor from the experimental data on elastic pd, pp, and np small–angle scattering in the energy range 10–26 GeV —L. S. Zolin, V. A. Nikitin, Truong Bien, and M. G. Shafranova. 18(1), 30–2 (Jan. 1974); CPM-7405F0244

Quartet s phase shift for nd scattering below the threshold in the linear approximation in the interaction range —V. N. Efimov and E. G. Tkachenko. 18(1), 33–4 (Jan. 1974); CPM-7405F0247

Analysis of reactions $pp \to NN2\pi$ and $pp \to NN3\pi$ at the incident proton momentum 19.1 GeV/c —Zh. S. Takibaev, É. G. Boos, L. A. Sanko, K. G. ZaĭtSEV, and K. P. Sharapov. 18(1), 49–52 (Jan. 1974); CPM-7405F0263

Analysis of inelastic collisions of superhigh–energy particles with nuclei —V. S. Barashenkov and S. M. Eliseev. 18(1), 102–4 (Jan. 1974); CPM-7405F0316

Energy spectra and polarization of protons from the reaction $pd \to ppn$ at 600 MeV —B. M. Golovin, G. I. Lykasov, A. M. Rozanova, and F. Sh. Khamraev. 18(2), 171–2 (Feb. 1974); CPM-7407X0053

Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. 18(2), 179–81 (Feb. 1974); CPM-7407X0061

Elastic $\pi^- p$, $K^- p$, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. 18(2), 182–6 (Feb. 1974); CPM-7407X0064

Slope parameter for pp elastic scattering in the region of the Coulomb interference —Kh. M. Chernev. 18(2), 208–9 (Feb. 1974); CPM-7407X0090

The charge–exchange reaction $K^- p \to \bar{K}^0 n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Some properties of the inclusive reaction $\pi^- p \gamma \pi^+ + \cdots$ and $\pi^- n \to \pi^+ + \cdots$ at $p = 40$ GeV/c —Alma–Ata. 18(3), 281–4 (Mar. 1974); CPM-7409X0039

Possible existence of an anomalous interaction of muons at energies above 10 TeV —N. N. Kalmykov and G. B. Khristiansen. 18(5), 551–3 (May 1974); CPM-7409X0661

Scaling invariance effects in proton–nucleus backward scattering in the few–GeV energy range —Yu. D. Bayukov, L. S. Lesin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 18(6), 639–40 (Jun. 1974)

Production of neutral strange particles in $\pi^- p$, $\pi^- n$, and $\pi^- C$ interactions at 40 GeV/c —Dubna. 18(6), 642–7 (Jun. 1974); CPM-7409X0476

13.80.D Elastic scattering

$\pi^- p$ elastic scattering at $p_{\pi^-} = 4.45$ GeV/c —A. A. Kartamyshev, K. I. Mukhin, A. S. Romantseva, M. M. Sulkovskaya, and A. F. Sustavov. 17(1), 42–3 (Jul. 1973); CPM-7312F0194

Elastic π^-p, K^-p, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. **18**(2), 182–6 (Feb. 1974); CPM-7407X0064

Possible spin effects in pp scattering at high energies and the $X^0(960)$ meson —A. Buyak, A. N. Zaslavskiĭ[1], V. I. Ogievetskiĭ, and A. T. Filippov. **18**(4), 462–4 (Apr. 1974); CPM-7409X0398

An investigation of $K^-p \to \bar{K}^0n$ charge exchange at 25 and 35 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, V. E. Postoev, Yu. D. Prokoshkin, and V. K. Semenov. **18**(5), 546–50 (May 1974); CPM-7409X0656

13.80.F Inelastic scattering, two-particle final states

Formation of heavy clusters and properties of topological cross sections of proton–proton interactions —Zh. S. Takibaev and P. A. Usik. **18**(4), 465–6 (Apr. 1974); CPM-7409X0401

Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. **18**(5), 538–45 (May 1974); CPM-7409X0648

The $\Delta N \to NN$ interaction —V. A. Karmanov, L. A. Kondratyuk, G. A. Leksin, and F. M. Khasanov. **18**(5), 583–5 (May 1974); CPM-7409X0693

The reaction $\pi^-p \to \eta^0n$ in the momentum region up to 50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, Yu. D. Prokoshkin, E. A. Razuvaev, and V. K. Semenov. **18**(6), 648–51 (Jun. 1974); CPM-7409X0482

13.80.H Inelastic scattering, many-particle final states

Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^-p \to e^+e^-n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **17**(1), 44–8 (Jul. 1973); CPM-7312F0196

Coherent generation of the system $2\pi^-\pi^+$ on nuclei —A. D. Vasil'kova, M. G. Gornov, V. G. Kirillov-Ugryumov, V. P. Protasov, and F. M. Sergeev. **17**(2), 166–70 (Aug. 1973); CPM-7406X0716

f^0-meson production in the reaction $\pi^-p \to p\pi^+\pi^-\pi^-$ at a momentum 4.5 GeV/c —G. K. Kliger, V. Z. Kolganov, V. T. Smolyankin, and A. F. Nilov. **17**(3), 286–8 (Sep. 1973); CPM-7406X0836

Study of the backward ρ^-meson production in the reaction $\pi^-p \to pp$ in the primary-momentum range 1.80–3.25 GeV/c —V. V. Vladimirskiĭ, R. I. Dzhelyadin, I. A. Dukhovskoi, V. V. Kishkurno, A. P. Krutenkova, V. V. Kulikov, I. A. Radkevich, and V. S. Fedorets. **17**(4), 411–2 (Oct. 1973); CPM-7407X0191

Analysis of dispersion relations for pion–nucleon scattering at high energies —L. D. Solov'ev and A. V. Shchelkachev. **17**(4), 437–41 (Oct. 1973); CPM-7407X0217

Properties of the proton and pion spectra for high-energy pp and πp interactions —Yu. I. Arestov, A. M. Moiseev, and K. A. Ter-Martirosyan. **17**(5), 574–5 (Nov. 1973); CPM-7407X1158

Production of γ quanta in π^-N interactions at 40 GeV/c —Budapest. **17**(6), 644–8 (Dec. 1973); CPM-7408X0450

The $\pi^-p \to n l^+ l^-$ process near the Δ (1236) resonance —G. I. Smirnov and N. M. Shumeĭko. **17**(6), 659–63 (Dec. 1973); CPM-7408X0465

Multiple production of charged particles in π^-p and π^-n interactions at 40 GeV/c —V. G. Grishin, S. P. Kuleshov, V. A. Matveev, A. N. Sisakyan, and G. Yancso. **17**(6), 667–8 (Dec. 1973); CPM-7408X0473

Regge parametrization of the $\pi\pi$ scattering amplitudes. description of the reaction $\pi^-p \to \pi^-\pi^+n$ by the OPER model —K. G. Boreskov, A. B. Kaĭdalov, and L. A. Ponomarev. **17**(6), 669–74 (Dec. 1973); CPM-7408X0475

Allowance for the triangular singularity in the partial-wave analysis of a three-meson system —M. N. Kobrinskiĭ and A. K. Likhoded. **17**(6), 683–7 (Dec. 1973); CPM-7408X0489

Inelastic π^+p interactions at energy 230 MeV —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, and V. M. Sidorov. **18**(1), 45–8 (Jan. 1974); CPM-7405F0259

Measurement of the pion and nucleon form factors at the Timelike four-momentum Transfers $k^2 = 1.7$, 2.2, and 2.9 F^{-2} —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **18**(1), 53–6 (Jan. 1974); CPM-7405F0267

Analysis of the reaction $\pi^-N(A) \to 2\pi^-\pi^+N(A)$ in momentum space —A. D. Vasil'kova, M. G. Gornov, V. I. Levina, V. P. Protasov, and F. M. Sergeev. **18**(2), 190–2 (Feb. 1974); CPM-7407X0072

Some properties of the inclusive reaction $\pi^-p\gamma\pi^+ + \cdots$ and $\pi^-n \to \pi^+ + \cdots$ at p = 40 GeV/c —Alma-Ata. **18**(3), 281–4 (Mar. 1974); CPM-7409X0039

13.80.K Inclusive reactions (including total cross sections)

Effect of polarization on inclusive hadron spectra —M. N. Kobrinskiĭ and A. K. Likhoded. **18**(4), 460–1 (Apr. 1974); CPM-7409X0396

Production of particles with large transverse momenta in the pionization region —E. M. Levin and M. G. Ryskin. **18**(5), 570–2 (May 1974); CPM-7409X0680

14. PROPERTIES OF SPECIFIC PARTICLES AND RESONANCES

14.20.– Baryons and baryon resonances

Correspondence between the irregularities of triangle Feynman diagrams and the masses of negative-strangeness baryon resonances —E. I. Dubovoi and V. P. Yakovenko. **17**(5), 569–73 (Nov. 1973); CPM-7407X1153

Effect of polarization on inclusive hadron spectra —M. N. Kobrinskiĭ and A. K. Likhoded. **18**(4), 460–1 (Apr. 1974); CPM-7409X0396

Production of nucleon resonances in inelastic electron–nucleon scattering —A. I. Mukhtarov, F. S. Sadykhov, and O. A. Vasil'ev. **18**(5), 562–4 (May 1974); CPM-7409X0672

14.40.– Mesons and meson resonances

Bound quasinuclear states of the system $2N2\bar{N}$ —E. S. Birger, B. O. Kerbikov, N. B. Konyukhova, and I. S. Shapiro. **17**(1), 92–5 (Jul. 1973); CPM-7312F0244

Heavy ρ mesons and the pion electromagnetic form factor —Yu. P. Shcherbin. **17**(2), 183–7 (Aug. 1973); CPM-7406X0733

Photoproduction of A_2 mesons at high energies —S. G. Matinyan and Yu. G. Shakhnazaryan. **17**(2), 196–8 (Aug. 1973); CPM-7406X0746

Search for a new vector meson in K_L^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. **18**(4), 424–5 (Apr. 1974); CPM-7409X0360

14.80.– Other and hypothetical particles

Sign of muon charge asymmetry in the reaction $e^-e^+ \to \mu^-\mu^+$ and models of unified electromagnetic–weak interaction —É. M. Lipmanov and N. V. Mikheev. **18**(2), 199–200 (Feb. 1974); CPM-7407X0081

Quark parton model and a possibility of detecting the W boson in high-energy nucleon–nucleon collisions —Yu. A. Golubkov, A. A. Ivanilov, Yu. P. Nikitin, and G. V. Rozhnov. **18**(2), 203–7 (Feb. 1974); CPM-7407X0085

21. NUCLEAR STRUCTURE

21.10.– General nuclear properties

21.10.D Binding energy and masses

Variations of the energy of the ground state of finite fermi systems and nuclear masses —G. G. Bunatyan. **17**(1), 15–21 (Jul. 1973); CPM-7312F0167

Penetration of a double-hump potential barrier —A. S. Tyapin and V. E. Marshalkin. **18**(2), 142–4 (Feb. 1974); CPM-7407X0024

Distribution of particle-hole states —P. É. Nemirovskiĭ and L. G. Manevich. **18**(2), 151–6 (Feb. 1974); CPM-7407X0033

Possibility of determining the π-He^3H^3 coupling —O. V. Dumbrais, F. Nikitiu, and Yu. A. Shcherbakov. **18**(2), 168–70 (Feb. 1974); CPM-7407X0050

Estimate of the method of multidimensional harmonics with the aid of Green's functions —A. M. Gorbatov. **18**(5), 524–8 (May 1974); CPM-7409X0634

Pion coupling constant and pionic radius of He^3 —B. Z. Kopeliovich. **18**(6), 594–6 (Jun. 1974); CPM-7409X0428

21.10.H Spin, parity, and isobaric spin

Angular $\gamma\gamma$-correlations in In^{115} —T. Badica, A. Gelberg, S. Dima, I. Popescu, and C. Chortea. **17**(4), 345–7 (Oct. 1973); CPM-7407X0125

Description of nuclear anomalous parity states in the K–harmonics method —M. V. Zhukov, M. I. Zhurina, and K. V. Shitikova. **17**(6), 620–2 (Dec. 1973); CPM-7408X0426

Effect of the Coriolis force on E1 transitions between rotational bands —M. I. Baznat and N. I. Pyatov. **18**(4), 391–4 (Apr. 1974); CPM-7409X0327

21.10.K Electromagnetic moments

Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. **17**(1), 6–9 (Jul. 1973); CPM-7312F0158

A method of calculating the properties of spherical even–even nuclei —M. A. Troitskiĭ and A. Ya. Simonov. **17**(6), 609–13 (Dec. 1973); CPM-7408X0415

Variation of nuclear quadrupole moments due to rotation, calculated with residual ph and pp interactions —J. Meyer and J. Speth. **17**(6), 623–5 (Dec. 1973); CPM-7408X0429

Deformation parameters for light nuclei —Yu. T. Grin' and A. B. Kochetov. **18**(2), 145–6 (Feb. 1974); CPM-7407X0027

Anharmonic effects in low–lying excitations of spherical nuclei —B. E. Stepanov. **18**(5), 515–20 (May 1974); CPM-7409X0625

21.10.M Level density, spacing, and structure

Nuclear reactions in muonic atoms —D. F. Zaretskiĭ and V. A. Lyul'ka. **17**(2), 139–41 (Aug. 1973); CPM-7406X0689

Spectra and angular distributions of photoprotons from the decay of dipole isobar–analog states —G. Ya. Tertychnyĭ and E. L. Yadrovskiĭ. **18**(1), 21–5 (Jan. 1974); CPM-7405F0235

The 0^+ levels in Xe^{130} —S. A. Bakiev, K. A. Baskova, S. S. Vasil'ev, M. A. Mokhsen, A. A. Sorokin, and T. V. Chugai. **18**(2), 119–21 (Feb. 1974); CPM-7407X0001

Shell effects in an excited fissile nucleus —G. D. Adeev and P. A. Cherdantsev. **18**(4), 381–5 (Apr. 1974); CPM-7409X0317

Level density of light even–even nuclei in a wide range of excitation energies —A. V. Ignatyuk, Yu. V. Sokolov, and Yu. N. Shubin. **18**(5), 510–4 (May 1974); CPM-7409X0620

21.30.+ Nuclear forces

Determination of the number of effective nucleons in carbon and xenon nuclei in the study of πN interactions —I. I. Vorob'ev, G. S. Veselovskiĭ, L. S. Novikov, and N. N. Shishov. **17**(3), 283–5 (Sep. 1973); CPM-7406X0833

Effects of dynamic deformation in the interaction of complex nuclei —V. P. Permyakov. **18**(1), 26–9 (Jan. 1974); CPM-7405F0240

21.40.+ Few–nucleon systems

The problem of four identical particles with separable interaction —V. F. Kharchenko and V. E. Kuz'michev. **17**(5), 511–6 (Nov. 1973); CPM-7407X1095

Spectrum of gamma quanta produced from the annihilation of stopped $\bar{p}$ in hydrogen —O. D. Dal'karov, V. M. Samoĭlov, and I. S. Shapiro. **17**(5), 566–8 (Nov. 1973); CPM-7407X1150

Baryon resonances of the quasi–nuclear type —O. D. Dal'karov, B. O. Kerbikov, I. A. Rumyantsev, and I. S. Shapiro. **17**(6), 688–92 (Dec. 1973); CPM-7408X0494

Anomalous interactions of muons and heavy μ–Mesic atoms —V. I. Zakharov and M. A. Shifman. **18**(1), 84–6 (Jan. 1974); CPM-7405F0298

Pion coupling constant and pionic radius of He^3 —B. Z. Kopeliovich. **18**(6), 594–6 (Jun. 1974); CPM-7409X0428

21.60.– Nuclear structure models and methods

The role of the core in formation of real nuclei —A. M. Gorbatov. **17**(6), 614–9 (Dec. 1973); CPM-7408X0420

Shell effects in an excited fissile nucleus —G. D. Adeev and P. A. Cherdantsev. **18**(4), 381–5 (Apr. 1974); CPM-7409X0317

Anharmonic effects in low–lying excitations of spherical nuclei —B. E. Stepanov. **18**(5), 515–20 (May 1974); CPM-7409X0625

21.60.C Shell model

Relation between the K–harmonic method and the method of generator coordinates —I. T. Obukhovskiĭ, Yu. F. Smirnov, V. N. Tolstoĭ, K. V. Shitikova, and F. El–Batununi. **17**(4), 386–90 (Oct. 1973); CPM-7407X0166

Coulomb corrections to the proton–proton scattering parameters and p^2–dependence of nuclear interactions —H. Kumpf. **17**(6), 602–4 (Dec. 1973); CPM-7408X0408

Study of quasielastic high energy electron scattering on light nuclei — E. L. Kuplennikov, N. G. Afanas'ev, V. A. Gol'dshtein, V. I. Ogurtsov, and V. G. Vlasenko. **18**(1), 10–1 (Jan. 1974); CPM-7405F0224

Shell corrections to nuclear masses in presence of pairing —V. M. Kolomiets. **18**(2), 147–50 (Feb. 1974); CPM-7407X0029

Distribution of particle–hole states —P. É. Nemirovskiĭ and L. G. Manevich. **18**(2), 151–6 (Feb. 1974); CPM-7407X0033

Decay widths of single–nucleon quasistationary states of deformed nuclei —S. G. Kadmenskiĭ and V. G. Khlebostroev. **18**(5), 505–9 (May 1974); CPM-7409X0615

Influence of nuclear shell structure on the polarization of elastically scattered neutrons —F. A. Ivanyuk and B. D. Konstantinov. **18**(6), 616–8 (Jun. 1974); CPM-7409X0450

21.60.E Collective models

Spin dependence of the density of excited states in the superfluid nucleus model —A. V. Ignatyuk. **17**(3), 258–65 (Sep. 1973); CPM-7406X0808

Calculation of the properties of low–lying levels taking multiquantum excitations into account —A. K. Petrauskas, G. P. Kamuntavičius, and K. I. Jankauskas. **17**(3), 266–8 (Sep. 1973); CPM-7406X0816

Rotational excitation of nuclei in the method of the generalized density matrix —S. T. Belyaev and V. G. Zelevinskiĭ. **17**(3), 269–76 (Sep. 1973); CPM-7406X0819

Introduction of proton, neutron, and hyperon collective degrees of freedom into the computation scheme of the K–harmonics method —A. M. Gorbatov. **17**(3), 277–80 (Sep. 1973); CPM-7406X0827

Properties of Sm^{150} in the phenomenological collective model —A. P. Budnik and A. A. Seregin. **18**(3), 255–7 (Mar. 1974); CPM-7409X0013

Allowance for anharmonic terms in the kinetic energy of complex and simple collective models —A. D. Fedorov. **18**(5), 521–3 (May 1974); CPM-7409X0631

21.60.G Cluster models

Transformation coefficients in the hyperspherical approach to the nonequal mass four–body problem —R. I. Dzhibuti, V. Yu. Tomchinskiĭ, and N. I. Shubitidze. **18**(6), 597–600 (Jun. 1974); CPM-7409X0431

21.60.J Hartree–Fock and random–phase approximations

Distortion effects in equivalent local potentials —Marcel Coz and John K. Munro Jr. **17**(4), 368–75 (Oct. 1973); CPM-7407X0148

Density of excited particle–hole states in the superfluid nuclear model —A. V. Ignatyuk and Yu. V. Sokolov. **17**(4), 376–80 (Oct. 1973); CPM-7407X0156

Shell corrections to nuclear masses in presence of pairing —V. M. Kolomiets. **18**(2), 147–50 (Feb. 1974); CPM-7407X0029

Equations for one– and two–particle density matrices in the Green's function method. Comparison with the random–phase approximation —S. P. Kamerdzhiev. **18**(4), 386–90 (Apr. 1974); CPM-7409X0322

Microscopic analog of the collective Bohr–Mottelson model —V. V. Vanagas and R. K. Kalinauskas. **18**(4), 395–400 (Apr. 1974); CPM-7409X0331

21.60.L Nuclear matter

Distribution of nuclear matter —I. K. Aver'yanov, A. A. Sadovoĭ, N. M. Chulkov, and L. L. Vakhlamova. 17(2), 132–3 (Aug. 1973); CPM-7406X0682

Effect of nuclear surface curvature and Coulomb field on the nucleon distribution —A. S. Tyapin. 17(5), 507–10 (Nov. 1973); CPM-7407X1091

Effect of the Δ resonance on the properties of nuclear matter —V. M. Osadchiev and M. A. Troitskiĭ. 18(3), 258–61 (Mar. 1974); CPM-7409X0016

Dependence of Λ–nuclear potential on the momentum and binding energy of hypernuclei —V. A. Filimonov. 18(6), 601–6 (Jun. 1974); CPM-7409X0435

21.80.+ Hypernuclei

Dependence of Λ–nuclear potential on the momentum and binding energy of hypernuclei —V. A. Filimonov. 18(6), 601–6 (Jun. 1974); CPM-7409X0435

23. NUCLEAR DECAY AND RADIOACTIVITY

23.20.– Electromagnetic transitions

Angular correlations of the final particles with the γ quanta in direct nuclear reactions in the forward hemisphere of the angular distributions —N. S. Zelenskaya, A. A. El–Kamhavy, and D. A. Shalabaev. 17(1), 27–31 (Jul. 1973); CPM-7312F0179

Time of x–ray emission by fragments fission with definite charged — A. G. Donichkin, S. M. Solov'ev, and V. P. Éĭsmont. 18(2), 138–41 (Feb. 1974); CPM-7407X0020

Excitation of nuclei by particles of near–barrier energies —V. K. Luk'yanov and A. I. Titov. 18(2), 157–61 (Feb. 1974); CPM-7407X0039

Equations for one– and two–particle density matrices in the Green's function method. Comparison with the random–phase approximation —S. P. Kamerdzhiev. 18(4), 386–90 (Apr. 1974); CPM-7409X0322

Transition radiation at the angle of total internal reflection of light from the medium —A. P. Kobzev, S. Mihaliak, E. Rutkovsky, and I. M. Frank. 18(4), 446–8 (Apr. 1974); CPM-7409X0382

23.20.F Transitions in nuclei with A 90

Probabilities of electromagnetic transitions in La^{132} and La^{133} nuclei — V. A. Morozov, T. M. Muminov, Kh. Fuya, and A. B. Khalikulov. 17(4), 348–51 (Oct. 1973); CPM-7407X0128

The nature of Ho^{165} excited states —V. M. Simonenko, S. P. Sitko, and V. A. Shevchenko. 18(3), 243–5 (Mar. 1974); CPM-7409X0001

Effect of the Coriolis force on E1 transitions between rotational bands —M. I. Baznat and N. I. Pyatov. 18(4), 391–4 (Apr. 1974); CPM-7409X0327

23.20.H Internal conversion and extranuclear effects

Excitation of O^{16} levels by high–energy protons —Yu. M. Goryachev, V. P. Kanavets, I. V. Kirpichnikov, I. I. Levintov, B. V. Morozov, N. A. Nikiforov, and A. S. Starostin. 17(5), 476–8 (Nov. 1973); CPM-7407X1060

T–invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. 18(1), 6–9 (Jan. 1974); CPM-7405F0220

23.40.– β–decay and electron and muon capture

23.40.D Theory and computation of matrix elements

Concerning the magic numbers of neutron–excess nuclei —B. N. Vinogradov and Yu. P. Elagin. 17(2), 128–31 (Aug. 1973); CPM-7406X0678

Fine structure of delayed proton spectrum —V. A. Karnaukhov, D. D. Bogdanov, and L. A. Petrov. 17(5), 465–8 (Nov. 1973); CPM-7407X1049

Determination of the probability of the (μ^-, ν2n) reaction resulting from μ^- capture in sulfur and calcium —V. S. Evseev and V. S. Roganov. 17(5), 528–30 (Nov. 1973); CPM-7407X1112

23.40.F Experiment and analysis of data

EO transition in Pd^{106} —E. P. Grigoriev, A. V. Zolotavin, and V. O. Sergeev. 17(6), 583–4 (Dec. 1973); CPM-7408X0389

The 0^+ levels in Xe^{130} —S. A. Bakiev, K. A. Baskova, S. S. Vasil'ev, M. A. Mokhsen, A. A. Sorokin, and T. V. Chugai. 18(2), 119–21 (Feb. 1974); CPM-7407X0001

Internal brehmsstrahlung accompanying electron capture in Cl^{36} —Yu. G. Smirnov and I. S. Batkin. 18(2), 122–4 (Feb. 1974); CPM-7407X0004

Emission of charged particles in capture of negative muons by emulsion nuclei —Yu. A. Batusov, S. A. Bunyatov, L. Vizireva, G. R. Gulkanyan, F. Mirsalikhova, and V. M. Sidorov. 18(5), 496–8 (May 1974); CPM-7409X0606

Spectra of the neutrons from the absorption of negative muons by heavy nuclei, and the resonance model of nuclear reactions —V. S. Evseev and T. N. Mamedov. 18(5), 499–502 (May 1974); CPM-7409X0609

23.60.+ α–decay

Probabilities of α decay of odd and odd–odd spherical nuclei and superfluidity —A. A. Martynov and S. G. Kadmenskiĭ. 17(1), 39–41 (Jul. 1973); CPM-7312F0191

Study of the decay of the He^6 nucleus from the ternary fission of U^{235} induced by thermal neutrons —V. N. Andreev, V. G. Nedopekin, and V. I. Rogov. 17(5), 469–70 (Nov. 1973); CPM-7407X1053

Search for α emission in the decay of spontaneously fissionable isomers —A. G. Belov, Yu. P. Gangrskiĭ, B. Dalkhsuren, A. M. Kucher, and Nguen Kong Khan. 17(5), 493–5 (Nov. 1973); CPM-7407X1077

Delayed protons from Te^{109} and the β–decay strength function —D. D. Bogdanov, V. A. Karnaukhov, and L. A. Petrov. 18(1), 1–5 (Jan. 1974); CPM-7405F0215

23.90.+ Other topics in nuclear decay and radioactivity

New approach to the search for the distribution of delayed–neutron precursors —M. Z. Tarasko and B. P. Maksyutenko. 17(6), 598–601 (Dec. 1973); CPM-7408X0404

Certain symmetry properties of the t–coefficients —M. S. Kildyushov and G. I. Kuznetsov. 17(6), 693–5 (Dec. 1973); CPM-7408X0499

24. NUCLEAR REACTIONS AND SCATTERING, GENERAL

24.10.– Nuclear reaction and scattering models and methods

Angular correlations of the final particles with the γ quanta in direct nuclear reactions in the forward hemisphere of the angular distributions —N. S. Zelenskaya, A. A. El–Kamhavy, and D. A. Shalabaev. 17(1), 27–31 (Jul. 1973); CPM-7312F0179

The theory of diffraction scattering —A. G. Sitenko and I. S. Dotsenko. 17(1), 35–8 (Jul. 1973); CPM-7312F0187

Calculation of the cross section of the reaction He^3(e, e'p)H^2 by the K–harmonics method. comparison with other calculations —V. K. Tartakovskiĭ and I. V. Kozlovskiĭ. 17(2), 142–5 (Aug. 1973); CPM-7406X0692

Two elastic scattering mechanisms in the optical model of the nucleus —V. M. Morozov, Yu. G. Zubov, and N. S. Lebedeva. 17(4), 381–5 (Oct. 1973); CPM-7407X0161

One–nucleon transfer reactions to quasi–intersecting levels $1/2^+$ [660] and $1/2^+$[400], $3/2^+$[651] and $3/2^+$[402] —F. A. Gareev, M. Baznat, H. J. Wiebicke, and H. Schulz. 17(4), 397–401 (Oct. 1973); CPM-7407X0177

Elastic and inelastic scattering of fast nucleons and the cluster structure of Li^6 —I. S. Dotsenko and A. D. Pursa. 17(4), 402–7 (Oct. 1973); CPM-7407X0182

Diffraction scattering of protons by the deformed nucleus C^{12} —I. S. Dotsenko and A. D. Pursa. 17(4), 408–10 (Oct. 1973); CPM-7407X0188

Excitation of nuclei by particles of near-barrier energies —V. K. Luk'yanov and A. I. Titov. 18(2), 157–61 (Feb. 1974); CPM-7407X0039

Nonadiabatic effects in high-energy scattering of particles by nuclei —V. M. Kolybasov and L. A. Kondratyuk. 18(2), 162–7 (Feb. 1974); CPM-7407X0044

24.30.– Resonance reactions and scattering

24.30.C Giant resonances

Photoneutron cross sections for W^{182} and W^{184} —Yu. I. Sorokin, V. A. Khrushchev, and B. A. Yur'ev. 17(1), 1–3 (Jul. 1973); CPM-7312F0153

Giant dipole resonance in nuclei of the transitional region around A~190 —A. M. Goryachev, G. N. Zalesnyĭ, S. F. Semenko, and B. A. Tulupov. 17(3), 236–9 (Sep. 1973); CPM-7406X0786

Giant-resonance photodeuterons from N^{15} —V. P. Denisov and I. Ya. Chubukov. 17(4), 354–5 (Oct. 1973); CPM-7407X0134

Excitation of giant quadrupole resonance in Ni^{60} by electron scattering —I. S. Gul'karov. 18(3), 267–9 (Mar. 1974); CPM-7409X0025

24.30.E Isobaric resonances

Spectra and angular distributions of photoprotons from the decay of dipole isobar-analog states —G. Ya. Tertychnyĭ and E. L. Yadrovskiĭ. 18(1), 21–5 (Jan. 1974); CPM-7405F0235

Spectra of the neutrons from the absorption of negative muons by heavy nuclei, and the resonance model of nuclear reactions —V. S. Evseev and T. N. Mamedov. 18(5), 499–502 (May 1974); CPM-7409X0609

24.60.+ Statistical theory and fluctuations

Angular and energy distributions of neutrons scattered inelastically by Fe and Ni nuclei —G. Ya. Tertychnyĭ and Yu. N. Shubin. 17(2), 146–8 (Aug. 1973); CPM-7406X0696

24.70.+ Polarization in reactions and scattering

Interaction of polarized resonant neutrons with oriented nuclei —V. P. Alfimenkov, V. N. Efimov, Ts. Ts. Panteleev, and Yu. I. Fenin. 17 (2), 149–52 (Aug. 1973); CPM-7406X0699

Baryon polarization in small-angle scattering by nuclei —L. I. Lapidus. 17(3), 307–12 (Sep. 1973); CPM-7406X0857

24.80.+ Fission

Measurement of the effective cross section for the fission of the $Cm^{244-248}$ isotopes by neutrons from a fast reactor —E. F. Fomushkin, E. K. Gutnikova, B. K. Maslennikov, and A. M. Korochkin. 17(1), 12–4 (Jul. 1973); CPM-7312F0164

Spontaneously fissioning isomer U^{238m} excited by capture of thermal neutrons —L. A. Popeko, G. A. Petrov, E. F. Kochubei, and T. K. Zvezdkina. 17(2), 120–3 (Aug. 1973); CPM-7406X0670

Variation of mass distribution of Th^{232} fission fragments with neutron energy —S. M. Dubrovina, V. I. Novgorodtseva, L. N. Morozov, V. A. Pchelin, L. V. Chistyakov, V. A. Shigin, and V. M. Shubko. 17(3), 240–2 (Sep. 1973); CPM-7406X0790

Fission of Np^{239} in the reaction $Np^{237}(t, pf)$ —M. F. Andreev, V. V. Gladkov, V. A. Zavgorodniĭ, V. I. Serov, and V. M. Surin. 17(3), 243–5 (Sep. 1973); CPM-7406X0793

Mass and charge balance in fission and delayed neutrons —B. P. Maksyutenko. 17(3), 246–50 (Sep. 1973); CPM-7406X0796

Angular distribution of fragments of spontaneously fissioning isomers —Pham Zui Hien. 17(3), 251–4 (Sep. 1973); CPM-7406X0801

Adiabatic excitation of fissioning nucleus —V. E. Marshalkin. 17(3), 255–7 (Sep. 1973); CPM-7406X0805

Prompt neutrons in the spontaneous fission of Cf^{246} —M. Dakovskiĭ, Yu. A. Lazarev, Yu. Ts. Oganesyan, and G. V. Buklanov. 17(4), 360–1 (Oct. 1973); CPM-7407X0140

Yields and kinetic energies of fragments from spontaneous and induced fission of Pu^{242} —N. P. D'yachenko, V. N. Kabenin, N. P. Kolosov, B. D. Kuz'minov, and A. I. Sergachev. 17(4), 362–5 (Oct. 1973); CPM-7407X0142

Angular distribution of neutrons from the ternary fissions of Cf^{252} nuclei —A. P. Grasevskiĭ, B. A. Bochagov, and Yu. A. Chestov. 17 (4), 366–7 (Oct. 1973); CPM-7407X0146

Study of the decay of the He^8 nucleus from the ternary fission of U^{235} induced by thermal neutrons —V. N. Andreev, V. G. Nedopekin, and V. I. Rogov. 17(5), 469–70 (Nov. 1973); CPM-7407X1053

Lifetime of the compound nucleus U^{239} produced in the U^{238}+n reaction with 1.6–4.3 MeV neutrons —P. E. Vorotnikov, Yu. V. Melikov, Yu. D. Otstavnov, A. F. Tulinov, and N. G. Chechenin. 17(5), 471–3 (Nov. 1973); CPM-7407X1055

The spectra of the fission x-rays at different kinetic energies of the light fragment and the "fine" structure of the mass yield —A. G. Donichkin, S. M. Solov'ev, and V. P. Éĭsmont. 17(5), 489–92 (Nov. 1973); CPM-7407X1073

Search for α emission in the decay of spontaneously fissionable isomers —A. G. Belov, Yu. P. Gangrskiĭ, B. Dalkhsuren, A. M. Kucher, and Nguen Kong Khan. 17(5), 493–5 (Nov. 1973); CPM-7407X1077

Cross section and angular anisotropy of fission of U^{238}, Bi^{209}, $Pb^{208-206}$, and Au^{197} by 70–200 MeV protons —V. S. Bychenkov, M. F. Lomanov, A. I. Obukhov, N. A. Perfilov, O. E. Shigaev, G. G. Shimchuk, and R. M. Yakovlev. 17(5), 496–7 (Nov. 1973); CPM-7407X1080

An investigation of the fission of U^{238} and Bi^{209} by 1-GeV protons — A. A. Kotov, G. G. Semenchuk, B. A. Bochagov, B. L. Gorshkov, G. G. Kovshevnyĭ, V. R. Reznik, and G. E. Solyakin. 17(5), 498–501 (Nov. 1973); CPM-7407X1082

Applicability of the quasiparticle excitation model in the vicinity of the saddle point of the fissionable nucleus —A. E. Savel'ev, V. Kh. Khoruzhiĭ, and S. V. Zhikareva. 17(5), 502–6 (Nov. 1973); CPM-7407X1086

Fragment characteristics in fission of the compound nucleus U^{236} induced by neutrons and α particles —A. F. Pavlov, V. N. Okolovich, P. P. D'yachenko, and B. D. Kuz'minov. 17(6), 595–7 (Dec. 1973); CPM-7408X0401

Angular distributions of fragments from fission of nuclei U^{238}, Th^{232}, Bi^{209}, Re^{186} induced by protons with T_p = 1 GeV —A. M. Zolotov, B. A. Bochagov, L. N. Andronenko, and G. E. Solyakin. 18(1), 15–7 (Jan. 1974); CPM-7405F0229

Search for a spontaneously fissioning isomer nucleus U^{236m} in the reaction $U^{235}(n, \gamma)$ —Zen Chang Bom, A. Laitay, A. A. Omelyanenko, Ts. Ts. Panteleev, S. M. Polikanov, Yu. V. Ryabov, and Tang San Khak. 18(1), 18–9 (Jan. 1974); CPM-7405F0232

Energy dependence of the ratio Γ_n/Γ_f for transuranium elements —V. S. Barashenkov, F. G. Zhereghi, A. S. Il'inov, and V. D. Toneev. 18(1), 20 (Jan. 1974); CPM-7405F0234

Time of x-ray emission by fragments fission with definite charged — A. G. Donichkin, S. M. Solov'ev, and V. P. Éĭsmont. 18(2), 138–41 (Feb. 1974); CPM-7407X0020

Penetration of a double-hump potential barrier —A. S. Tyapin and V. E. Marshalkin. 18(2), 142–4 (Feb. 1974); CPM-7407X0024

Probability of formation of spontaneously fissioning isomer states following thermal neutron capture by U^{235} and Pu^{239} —G. V. Valskiĭ, O. M. Mrachkovskiĭ, G. A. Petrov, and Yu. S. Pleva. 18 (3), 253–4 (Mar. 1974); CPM-7409X0011

Fission of U^{233} and U^{235} by thermal neutrons —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(4), 364–8 (Apr. 1974); CPM-7409X0300

Angular and kinematical correlations of α particles and neutrons from triple fission of Cf^{252} nuclei —A. P. Graevskiĭ and G. E. Solyakin. 18(4), 369–70 (Apr. 1974); CPM-7409X0305

Prompt-neutron multiplicity in spontaneous fission —D. M. Dakovskiĭ, Yu. A. Lazarev, and Yu. Ts. Oganesyan. 18(4), 371–6 (Apr. 1974); CPM-7409X0307

Production of nuclei in the reactions with Kr and Xe ions —Yu. Ts. Oganesyan, Yu. E. Penionzhkevich, Nguyen Tac Anh, D. M. Nadkarnee, K. A. Gavrilov, Kim De En, and M. Yussonua. 18(4), 377–80 (Apr. 1974); CPM-7409X0313

Shell effects in an excited fissile nucleus —G. D. Adeev and P. A. Cherdantsev. 18(4), 381–5 (Apr. 1974); CPM-7409X0317

Emission of helium nuclei in the fragment direction following U^{235} fission by thermal neutrons —V. N. Andreev, V. G. Nedopekin, and V. I. Rogov. 18(5), 503–4 (May 1974); CPM-7409X0613

Spontaneous fission of Cf^{252} —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(6), 589–93 (Jun. 1974); CPM-7409X0423

24.90.+ Other topics in nuclear reactions and scattering

Determination of the vertex coupling constants from an analysis of the single-nucleon transfer on the nuclei Mg^{26}, Al^{27}, and Si^{28} —V. V. Turovtsev and R. Yarmukhamedov. 17(1), 32–4 (Jul. 1973); CPM-7312F0184

25. NUCLEAR REACTIONS AND SCATTERING, SPECIFIC REACTIONS

25.10.+ Nuclear reactions and scattering involving few-nucleon systems ($A \leq 4$)

Calculation of the cross section of the reaction $He^3(e, e'p)H^2$ by the K-harmonics method. comparison with other calculations —V. K. Tartakovskiĭ and I. V. Kozlovskiĭ. 17(2), 142–5 (Aug. 1973); CPM-7406X0692

Spin effects in the theory of pHe^4 scattering —G. I. Lykasov and A. V. Tarasov. 17(2), 153–6 (Aug. 1973); CPM-7406X0703

Investigation of the nodes of the wave functions of the relative motion of the lightest nuclei αd and πt with the aid of the quasielastic knockout form factors and scattering phase shifts —v. P. Korennoĭ, I. V. Kurdyumov, V. G. Neudachin, and Yu. F. Smirnov. 17(4), 391–6 (Oct. 1973); CPM-7407X0171

Nonadiabatic effects in high-energy scattering of particles by nuclei —V. M. Kolybasov and L. A. Kondratyuk. 18(2), 162–7 (Feb. 1974); CPM-7407X0044

Possibility of determining the π-He^3H^3 coupling —O. V. Dumbrais, F. Nikitiu, and Yu. A. Shcherbakov. 18(2), 168–70 (Feb. 1974); CPM-7407X0050

Elastic π-He^4 small-angle scattering at 3.48 and 6.13 GeV/c —A. A. Nomofilov, I. M. Sitnik, L. A. Slepets, and L. N. Strunov. 18(2), 187–9 (Feb. 1974); CPM-7407X0069

Behavior of the He^3 $(e,e'p)H^2$ cross section at high reaction-fragment relative-motion energies —V. K. Tartakovskiĭ. 18(4), 409–11 (Apr. 1974); CPM-7409X0345

25.20.+ Photonuclear reactions and scattering ($A \geq 5$)

Photoneutron cross sections for W^{182} and W^{184} —Yu. I. Sorokin, V. A. Khrushchev, and B. A. Yur'ev. 17(1), 1–3 (Jul. 1973); CPM-7312F0153

Dependence of the yield of pions and protons emitted at $\theta_{lab} = 90°$ at $E_\gamma^{max} = 400$ MeV on the mass number of the nucleus — N. V. Goncharov, A. I. Derebchinskii, O. G. Konovalov, S. G. Tonapetyan, and V. M. Khovorostyan. 17(2), 124–7 (Aug. 1973); CPM-7406X0674

Photospallation of nuclei in the energy region from 2 to 4.5 BeV —G. A. Vartapetyan, A. S. Danagulyan, N. A. Demëkhina, and A. G. Khudaverdyan. 17(4), 356–9 (Oct. 1973); CPM-7407X0136

Determination of the cross section of photodisintegration of emulsion nuclei by 1.0–4.5 GeV γ-quanta —Dzh. A. Galstyan, A. M. Zverev, V. V. Mameev, and M. A. Martirosyan. 17(5), 474–5 (Nov. 1973); CPM-7407X1058

Spectra and angular distributions of photoprotons from the decay of dipole isobar-analog states —G. Ya. Tertychnyĭ and E. L. Yadrovskiĭ. 18(1), 21–5 (Jan. 1974); CPM-7405F0235

The reaction $Li^7(\gamma,pt)H^3$ at $E_\gamma < 27$ MeV—E. A. Kotikov and E. D. Makhnovskiĭ. 18(2), 125–7 (Feb. 1974); CPM-7407X0007

Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. 18(4), 420–3 (Apr. 1974); CPM-7409X0356

Calculation of the cross sections for pion photoproduction from atomic nuclei —A. V. Shebeko and N. V. Goncharov. 18(5), 532–7 (May 1974); CPM-7409X0642

25.30.+ Lepton-induced reactions and scattering ($A \geq 5$)

Investigation of the depth-intensity curve of the nuclear events induced by cosmic-ray muons —L. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, O. G. Ryazhskaya, and L. N. Stepanets. 17(1), 51–3 (Jul. 1973); CPM-7312F0203

Effect of exchange forces on the sum rule for electron scattering by nuclei —E. V. Inopin and S. N. Roshchupkin. 17(5), 526–7 (Nov. 1973); CPM-7407X1110

Study of electron-photon showers in lead in the 150–550 MeV energy region —A. S. Belousov, E. I. Malinovskii, S. V. Rusakov, V. V. Samedov, and P. N. Shareiko. 17(5), 537–9 (Nov. 1973); CPM-7407X1121

Study of quasielastic high energy electron scattering on light nuclei — E. L. Kuplennikov, N. G. Afanas'ev, V. A. Gol'dshtein, V. I. Ogurtsov, and V. G. Vlasenko. 18(1), 10–1 (Jan. 1974); CPM-7405F0224

Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. 18(2), 128–30 (Feb. 1974); CPM-7407X0010

Neutrino-induced excitation of nuclei —V. G. Tsinoev and L. N. Zakharov. 18(2), 201–2 (Feb. 1974); CPM-7407X0083

Excitation of level complexes in Si^{28} by electron inelastic scattering — I. I. Chkalov, N. G. Shevchenko, N. G. Afanas'ev, I. I. Zalyubovskiĭ, A. A. Khomich, V. N. Polishchuk, A. S. Litvinenko, and A. Yu. Buki. 18(5), 487–9 (May 1974); CPM-7409X0597

Production of nucleon resonances in inelastic electron–nucleon scattering —A. I. Mukhtarov, F. S. Sadykhov, and O. A. Vasil'ev. 18(5), 562–4 (May 1974); CPM-7409X0672

Sum rules in scattering of electrons by nuclei —V. D. Éfros. 18(6), 607–15 (Jun. 1974); CPM-7409X0441

Influence of nuclear shell structure on the polarization of elastically scattered neutrons —F. A. Ivanyuk and B. D. Konstantinov. 18(6), 616–8 (Jun. 1974); CPM-7409X0450

25.40.– Nucleon-induced reactions and scattering ($A \geq 5$)

Interaction of neutrons of energy 13–17 MeV with lead isotopes —B. A. Benetskiĭ, B. B. Nefedov, I. M. Frank, and I. V. Shtranikh. 17 (1), 10–1 (Jul. 1973); CPM-7312F0162

Secondary particles produced in interactions of multiply-charged relativistic nuclei with emulsion nuclei —V. E. Dudkin, Yu. V. Potapov, Z. S. Khokhlova, N. S. Shimanskaya, and R. M. Yakovlev. 18(2), 193–4 (Feb. 1974); CPM-7407X0075

Shell-model approach to the description of nucleon–nucleus elastic scattering —D. F. Zaretskiĭ and M. G. Urin. 18(3), 262–6 (Mar. 1974); CPM-7409X0020

25.40.C Elastic proton scattering

Elastic and inelastic scattering of fast nucleons and the cluster structure of Li^6 —I. S. Dotsenko and A. D. Fursa. 17(4), 402–7 (Oct. 1973); CPM-7407X0182

Diffraction scattering of protons by the deformed nucleus C^{12} —I. S. Dotsenko and A. D. Fursa. 17(4), 408–10 (Oct. 1973); CPM-7407X0188

25.40.D Elastic neutron scattering

The nature of Ho^{165} excited states —V. M. Simonenko, S. P. Sitko, and V. A. Shevchenko. 18(3), 243–5 (Mar. 1974); CPM-7409X0001

25.40.F Inelastic nucleon scattering and (n,p), (p,n) reactions

Determination of the vertex coupling constants from an analysis of the single-nucleon transfer on the nuclei Mg^{26}, Al^{27}, and Si^{28} —V. V. Turovtsev and R. Yarmukhamedov. 17(1), 32–4 (Jul. 1973); CPM-7312F0184

Angular and energy distributions of neutrons scattered inelastically by Fe and Ni nuclei —G. Ya. Tertychnyĭ and Yu. N. Shubin. 17(2), 146–8 (Aug. 1973); CPM-7406X0696

Direct processes in the inelastic scattering of 14.4-MeV neutrons by Nb and Co nuclei —O. A. Sal'nikov, E. M. Saprykin, G. V. Kotel'nikova, G. N. Lovchikova, A. A. Luk'yanov, and N. I. Fetisov. 17(5), 523–5 (Nov. 1973); CPM-7407X1107

Cross sections of (n,p) and (n,α) reactions at a neutron energy 14–15 MeV —V. N. Levkovskiĭ. 18(4), 361–3 (Apr. 1974); CPM-7409X0297

25.40.H (N,d), (N,t), (N,³He), and (N,α) reactions

Isotope effect in nuclear reactions with high-energy particles —V. I. Bogatin, V. K. Bondarev, V. F. Litvin, O. V. Lozhkin, N. A. Perfilov, and Yu. P. Yakovlev. 17(1), 4–5 (Jul. 1973); CPM-7312F0156

Determination of the vertex coupling constants from an analysis of the single-nucleon transfer on the nuclei Mg^{26}, Al^{27}, and Si^{28} —V. V. Turovtsev and R. Yarmukhamedov. 17(1), 32–4 (Jul. 1973); CPM-7312F0184

Cross sections of (n,p) and (n,α) reactions at a neutron energy 14–15 MeV —V. N. Levkovskiĭ. 18(4), 361–3 (Apr. 1974); CPM-7409X0297

Effect of nucleon correlations in the reaction $C^{12}(p,2p)B^{11}$ within the framework of the Glauber theory —K. N. Ermakov, M. B. Zhalov, and V. E. Starodubskiĭ. 18(4), 412–5 (Apr. 1974); CPM-7409X0348

Peripheral-model analysis of (p,d) reactions with allowance for the nuclear form factor —Yu. V. Orlov. 18(5), 529–31 (May 1974); CPM-7409X0639

25.40.L Radiative capture

Structure of lower levels of Ni^{59} and role of simple configurations in the de-excitation of the capture state in the reaction $Ni^{58}(n,\gamma)Ni^{59}$ —V. A. Knat'ko, V. I. Nelaeva, and E. A. Rudak. 17(2), 134–6 (Aug. 1973); CPM-7406X0684

T-invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. 18(1), 6–9 (Jan. 1974); CPM-7405F0220

Peculiarities in thermal neutron capture by even-even nuclei in the region A = 60–80 —A. V. Murzin. 18(1), 12–4 (Jan. 1974); CPM-7405F0226

Nature of excited states of Zn^{69}, Ge^{71}, $Se^{77,79,81}$ nuclei produced in capture of thermal neutrons —A. V. Murzin and V. M. Kolomiets. 18(3), 246–9 (Mar. 1974); CPM-7409X0004

25.40.P Reactions and scattering at energies 100 MeV

Isotope effect in nuclear reactions with high-energy particles —V. I. Bogatin, V. K. Bondarev, V. F. Litvin, O. V. Lozhkin, N. A. Perfilov, and Yu. P. Yakovlev. 17(1), 4–5 (Jul. 1973); CPM-7312F0156

Inelasticity of interactions of 1–10 TeV nucleons with lead nuclei —M. O. Azaryan and É. A. Mamudzhanyan. 17(3), 289–90 (Sep. 1973); CPM-7406X0839

Measurement of the total nucleon inelasticity coefficient in the interaction with iron nuclei —M. O. Azaryan, É. A. Mamidzhanyan, and R. A. Suleĭmanov. 17(3), 291–2 (Sep. 1973); CPM-7406X0841

Certain characteristics of decays produced in emulsion nuclei by 70 GeV/c protons —G. S. Deka, K. Pathak, and H. K. Sarma. 17(3), 341–2 (Sep. 1973); CPM-7406X0891

25.50.– ²H– and ³H–induced reactions and scattering (A ≥ 5)

Determination of the vertex coupling constants from an analysis of the single-nucleon transfer on the nuclei Mg^{26}, Al^{27}, and Si^{28} —V. V. Turovtsev and R. Yarmukhamedov. 17(1), 32–4 (Jul. 1973); CPM-7312F0184

Inelastic interactions and proton stripping for 9.4-GeV/c deuterons in emulsion —A. O. Vaisenberg, E. D. Kolganova, and N. V. Rabin. 18(6), 635–8 (Jun. 1974); CPM-7409X0469

25.60.– ³He and ⁴He–induced reactions and scattering (A ≥ 5)

25.60.C Elastic and inelastic scattering

Elastic interactions of high-energy helium ions with atomic nuclei —V. S. Barashenkov, K. K. Gudima, F. G. Zheregi, A. S. Il'inov, and V. D. Toneev. 17(2), 221–4 (Aug. 1973); CPM-7406X0771

Back scattering of α particles by C^{12} and C^{13} —B. I. Kuznetsov, I. P. Chernov, and R. E. Ovsyannikova. 18(5), 490–1 (May 1974); CPM-7409X0600

αγ angular correlations in inelastic scattering of α particles —T. A. Dmitrieva, N. S. Zelenskaya, A. A. Elkamhavi, and I. B. Teplov. 18(6), 626–30 (Jun. 1974); CPM-7409X0460

25.60.F Two- or three-nucleon transfer reactions

Angular correlations of the final particles with the γ quanta in direct nuclear reactions in the forward hemisphere of the angular distributions —N. S. Zelenskaya, A. A. El-Kamhavy, and D. A. Shalabaev. 17(1), 27–31 (Jul. 1973); CPM-7312F0179

Neutron polarization in the reaction $Be^{9}(\alpha,n)C^{12}$ —V. V. Okorokov, V. M. Serezhin, V. A. Smotryaev, D. L. Tolchenkov, I. S. Trostin, and Yu. N. Cheblukov. 17(4), 352–3 (Oct. 1973); CPM-7407X0132

Investigation of the reaction $Si^{28}(He^{3},p)P^{30}$ —Yu. V. Nikitenko, G. M. Osetinskiĭ, Song Wong Nam, and M. A. Faruk. 18(5), 492–5 (May 1974); CPM-7409X0602

25.70.+ Heavy-particle induced reactions and scattering (A ≥ 5)

Measurement of coincidences between positrons and delayed protons for Te^{109} —D. D. Bogdanov, V. A. Karnaukhov, and L. A Petrov. 17(3), 233–5 (Sep. 1973); CPM-7406X0783

Direct reactions in the interaction of Ne^{22} with Th^{232} —A. G. Artyukh, J. Wilczynski, V. V. Volkov, G. F. Gridnev, and V. L. Mikheev. 17(6), 586–9 (Dec. 1973); CPM-7408X0392

Production of nuclei in the reactions with Kr and Xe ions —Yu. Ts. Oganesyan, Yu. E. Penionzhkevich, Nguyen Tac Anh, D. M. Nadkarnee, K. A. Gavrilov, Kim De En, and M. Yussonua. 18(4), 377–80 (Apr. 1974); CPM-7409X0313

25.80.+ Meson- and hyperon-induced reactions and scattering (A ≥ 5)

Neutron polarization in nuclear μ^- capture —Yu. A. Salganik and R. A. Éramzhyan. 17(2), 137–8 (Aug. 1973); CPM-7406X0687

Investigation of the coherent process $\pi^- \to \pi^- \pi^0$ at 3.3 GeV/c momentum on the xenon nucleus —I. I. Vorob'ev, L. S. Novikov, and N. N. Shishov. 17(3), 281–2 (Sep. 1973); CPM-7406X0831

Determination of the number of effective nucleons in carbon and xenon nuclei in the study of πN interactions —I. I. Vorob'ev, G. S. Veselovskiĭ, L. S. Novikov, and N. N. Shishov. 17(3), 283–5 (Sep. 1973); CPM-7406X0833

Experimental study of the mechanism of the reaction $Li^{6}(\pi^-,\pi^- p)He^{5}$ —Yu. D. Bayukov, L. S. Vorob'ev, V. M. Kolybasov, G. A. Leksin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 17(5), 479–83 (Nov. 1973); CPM-7407X1063

Generation of charged particles by π mesons on light nuclei at high energy —V. G. Grishin, S. M. Eliseev, Sh. V. Inogamov, and J. M. Kohli. 17(5), 531–4 (Nov. 1973); CPM-7407X1115

The $(\pi^+,2p)$ reaction in Li nuclei at 85±4 MeV —V. S. Nadezhdin, N. I. Petrov, V. I. Satarov, and I. K. Vzorov. 17(6), 590–4 (Dec. 1973); CPM-7408X0396

Production of neutrons in Pb, Cd, Fe, and Al by high energy muons —G. V. Gorshkov, V. A. Zyabkin, and R. M. Yakovlev. 18(1), 57–61 (Jan. 1974); CPM-7405F0271

Absorption of stopped π^- mesons by nitrogen nuclei with formation of Li^{8} —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 131–4 (Feb. 1974); CPM-7407X0013

Absorption of stopped π^- mesons by oxygen nuclei with formation of Li^{8} —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 135–7 (Feb. 1974); CPM-7407X0017

Nuclear absorption cross sections for pions, kaons, protons, and antiprotons in the momentum range 6–60 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, R. N. Krasnokutskiĭ, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. 18(2), 173–8 (Feb. 1974); CPM-7407X0055

π^+–meson double charge exchange on Bi^{209} nuclei —Yu. A. Batusov, Z. Ganzorig, I. V. Dudova, B. P. Osipenko, V. M. Sidorov, V. A. Khalkin, and D. Chultém. 18(3), 250–2 (Mar. 1974); CPM-7409X0008

Isobar mechanism of pion double charge exchange at high energy — O. D. Dal'karov and V. M. Kolybasov. 18(4), 416–9 (Apr. 1974); CPM-7409X0352

27. PROPERTIES OF SPECIFIC NUCLEI LISTED BY MASS RANGES

27.30.+ $20 \leq A \leq 38$

Internal brehmsstrahlung accompanying electron capture in Cl^{36} —Yu. G. Smirnov and I. S. Batkin. 18(2), 122–4 (Feb. 1974); CPM-7407X0004

Deformation parameters for light nuclei —Yu. T. Grin' and A. B. Kochetov. 18(2), 145–6 (Feb. 1974); CPM-7407X0027

Excitation of level complexes in Si^{28} by electron inelastic scattering — I. I. Chkalov, N. G. Shevchenko, N. G. Afanas'ev, I. I. Zalyubovskiĭ, A. A. Khomich, V. N. Polishchuk, A. S. Litvinenko, and A. Yu. Buki. 18(5), 487–9 (May 1974); CPM-7409X0597

27.60.+ $90 \leq A \leq 149$

Measurement of coincidences between positrons and delayed protons for Te^{109} —D. D. Bogdanov, V. A. Karnaukhov, and L. A. Petrov. 17(3), 233–5 (Sep. 1973); CPM-7406X0783

Angular $\gamma\gamma$–correlations in In^{115} —T. Badica, A. Gelberg, S. Dima, I. Popescu, and C. Chortea. 17(4), 345–7 (Oct. 1973); CPM-7407X0125

EO transition in Pd^{106} —E. P. Grigoriev, A. V. Zolotavin, and V. O. Sergeev. 17(6), 583–4 (Dec. 1973); CPM-7408X0389

The 0^+ levels in Xe^{130} —S. A. Bakiev, K. A. Baskova, S. S. Vasil'ev, M. A. Mokhsen, A. A. Sorokin, and T. V. Chugai. 18(2), 119–21 (Feb. 1974); CPM-7407X0001

27.70.+ $150 \leq A \leq 189$

Photoneutron cross sections for W^{182} and W^{184} —Yu. I. Sorokin, V. A. Khrushchev, and B. A. Yur'ev. 17(1), 1–3 (Jul. 1973); CPM-7312F0153

Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. 17(1), 6–9 (Jul. 1973); CPM-7312F0158

Probabilities of α decay of odd and odd–odd spherical nuclei and superfluidity —A. A. Martynov and S. G. Kadmenskiĭ. 17(1), 39–41 (Jul. 1973); CPM-7312F0191

Probabilities of electromagnetic transitions in La^{132} and La^{133} nuclei — V. A. Morozov, T. M. Muminov, Kh. Fuya, and A. B. Khalikulov. 17(4), 348–51 (Oct. 1973); CPM-7407X0128

The nature of Ho^{165} excited states —V. M. Simonenko, S. P. Sitko, and V. A. Shevchenko. 18(3), 243–5 (Mar. 1974); CPM-7409X0001

27.90.+ $220 \leq A$

Probabilities of α decay of odd and odd–odd spherical nuclei and superfluidity —A. A. Martynov and S. G. Kadmenskiĭ. 17(1), 39–41 (Jul. 1973); CPM-7312F0191

An investigation of three–particle decays of Li^6 —K. P. Artemov, V. Z. Gol'dberg, I. P. Petrov, V. P. Rudakov, I. N. Serikov, and V. A. Timofeev. 17(2), 115–6 (Aug. 1973); CPM-7406X0665

Radiative capture of protons by Zn^{64}, Zn^{66}, and Zn^{68} nuclei —B. A. Nemashkalo, V. E. Storizhko, V. F. Boldyshev, O. I. Ekhichev, A. P. Klyucharev, and A. I. Popov. 17(2), 117–9 (Aug. 1973); CPM-7406X0667

Spontaneously fissioning isomer U^{238m} excited by capture of thermal neutrons —L. A. Popeko, G. A. Petrov, E. F. Kochubei, and T. K. Zvezdkina. 17(2), 120–3 (Aug. 1973); CPM-7406X0670

Variation of mass distribution of Th^{232} fission fragments with neutron energy —S. M. Dubrovina, V. I. Novgorodtseva, L. N. Morozov, V. A. Pchelin, L. V. Chistyakov, V. A. Shigin, and V. M. Shubko. 17(3), 240–2 (Sep. 1973); CPM-7406X0790

Fission of Np^{239} in the reaction $Np^{237}(t, pf)$ —M. F. Andreev, V. V. Gladkov, V. A. Zavgorodniĭ, V. I. Serov, and V. M. Surin. 17(3), 243–5 (Sep. 1973); CPM-7406X0793

Prompt neutrons in the spontaneous fission of Cf^{246} —M. Dakovskiĭ, Yu. A. Lazarev, Yu. Ts. Oganesyan, and G. V. Buklanov. 17(4), 360–1 (Oct. 1973); CPM-7407X0140

Yields and kinetic energies of fragments from spontaneous and induced fission of Pu^{242} —N. P. D'yachenko, V. N. Kabenin, N. P. Kolosov, B. D. Kuz'minov, and A. I. Sergachev. 17(4), 362–5 (Oct. 1973); CPM-7407X0142

Angular distribution of neutrons from the ternary fissions of Cf^{252} nuclei —A. P. Graevskiĭ, B. A. Bochagov, and Yu. A. Chestov. 17 (4), 366–7 (Oct. 1973); CPM-7407X0146

Deformation parameters for light nuclei —Yu. T. Grin' and A. B. Kochetov. 18(2), 145–6 (Feb. 1974); CPM-7407X0027

Spontaneous fission of Cf^{252} —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(6), 589–93 (Jun. 1974); CPM-7409X0423

29. EXPERIMENTAL METHODS AND INSTRUMENTATION FOR ELEMENTARY PARTICLE AND NUCLEAR PHYSICS

Range and energy loss of Pu^{238} α particles in certain gases —I. E. Nakhutin and N. N. Demidovich. 17(6), 649–53 (Dec. 1973); CPM-7408X0455

Energy–loss and range straggling of α particles from Pu^{238} in some gases —N. N. Demidovich, I. E. Nakhutin, and V. G. Shatunov. 18(1), 70–3 (Jan. 1974); CPM-7405F0284

31. ATOMS

Nuclear reactions in muonic atoms —D. F. Zaretskiĭ and V. A. Lyul'ka. 17(2), 139–41 (Aug. 1973); CPM-7406X0689

41. PHYSICS OF GASES

Range and energy loss of Pu^{238} α particles in certain gases —I. E. Nakhutin and N. N. Demidovich. 17(6), 649–53 (Dec. 1973); CPM-7408X0455

51. STRUCTURE OF LIQUIDS AND SOLIDS; CRYSTALLOGRAPHY

Determination of the degree of polarization of coherent bremsstrahlung from a diamond single crystal —V. G. Gorbenko, L. M. Derkach, Yu. V. Zhebrovskiĭ, L. Ya. Kolesnikov, and A. L. Rubashkin. 17(4), 413–6 (Oct. 1973); CPM-7407X0193

66. MAGNETIC RESONANCE AND RELAXATION IN CONDENSED MATTER; MOSSBAUER EFFECT

"Elementary length" and the Mossbauer effect —D. I. Blokhintsev. 17 (4), 433–6 (Oct. 1973); CPM-7407X0213

71. OPTICS

Scattering of light by a charge in an external electromagnetic field — E. V. Doktorov, I. A. Malkin, and V. I. Man'ko. 18(1), 74–8 (Jan. 1974); CPM-7405F0288

87. COSMIC RAYS

87.50.+ Extensive air showers

Investigation of the depth–intensity curve of the nuclear events induced by cosmic–ray muons —L. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, O. G. Ryazhskaya, and L. N. Stepanets. 17(1), 51–3 (Jul. 1973); CPM-7312F0203

Lateral distribution of the electronic component of extensive air showers —I. A. Dymova and N. N. Kalmykov. 17(1), 54–6 (Jul. 1973); CPM-7312F0206
Muon component of an extensive air shower near the shower axis — N. P. Il'ina, N. N. Kalmykov, J. Oleinichak, B. A. Khrenov, G. B. Khristiansen, and Z. V. Yarochkina. 18(1), 62–9 (Jan. 1974); CPM-7405F0276
Experimental data on extensive air showers at heights 5000–12000 m —R. A. Antonov, I. P. Ivanenko, and Z. I. Tulinova. 18(3), 285–8 (Mar. 1974); CPM-7409X0043

87.60.+ High-energy interactions

Possible behavior of the inelastic cross section of the nucleon interaction with air nuclei at energies higher than 30 GeV —V. V. Akimov, V. E. Kozlov, and V. Ya. Shestoperov. 17(5), 535–6 (Nov. 1973); CPM-7407X1119
Muon contribution to the development of electron-nuclear showers generated by cosmic rays —A. F. Knyazev, V. B. Kosarev, B. A. Khrenov, and Z. V. Yarochkina. 18(4), 430–3 (Apr. 1974); CPM-7409X0366

87.80.+ Muons and neutrinos

Intensity of cosmic muons at large rock and water depths in ground and their energy spectrum at sea level —Yu. N. Vavilov, Yu. A. Trubkin, and V. M. Fedorov. 18(4), 434–9 (Apr. 1974); CPM-7409X0370
Muons in extensive air showers (interaction with matter) —N. P. Il'ina, B. A. Khrenov, and Z. V. Yarochkina. 18(4), 440–5 (Apr. 1974); CPM-7409X0376
Possible existence of an anomalous interaction of muons at energies above 10 TeV —N. N. Kalmykov and G. B. Khristiansen. 18(5), 551–3 (May 1974); CPM-7409X0661

AUTHOR INDEX TO VOLUMES 17-18

Papers are arranged in ascending page number order.

A

Abdullaev, F. Kh.—Gravitation and the finite renormalization of the muon mass in quantum field theory —F. Kh. Abdullaev. 17(4), 450–1 (Oct. 1973); CPM-7407X0230

—Regularization of weak interactions with W bosons by means of nonpolynomial Lagrangians —F. Kh. Abdullaev. 18(3), 333–5 (Mar. 1974); CPM-7409X0091

Abramovskiĭ, V. A.—Character of inclusive spectra and fluctuations produced in inelastic processes by multipomeron exchange —V. A. Abramovskiĭ, V. N. Gribov, and O. V. Kancheli. 18(3), 308–17 (Mar. 1974); CPM-7409X0066

Abramyan, L. O.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. 18(4), 420–3 (Apr. 1974); CPM-7409X0356

Adamyan, F. V.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. 18(4), 420–3 (Apr. 1974); CPM-7409X0356

Adeev, G. D.—Shell effects in an excited fissile nucleus —G. D. Adeev and P. A. Cherdantsev. 18(4), 381–5 (Apr. 1974); CPM-7409X0317

Afanas'ev, N. G.—Inelastic electromagnetic form factors of K^{39} and Ca^{40} —V. G. Vlasenko, N. G. Afanas'ev, V. A. Gol'dshtein , S. V. Dementiĭ, E. L. Kuplennikov, V. I. Ogurtsov, and V. I. Startsev. 17(6), 585 (Dec. 1973); CPM-7408X0391

—Study of quasielastic high energy electron scattering on light nuclei —É. L. Kuplennikov, N. G. Afanas'ev, V. A. Gol'dshteĭn, V. I. Ogurtsov, and V. G. Vlasenko. 18(1), 10–1 (Jan. 1974); CPM-7405F0224

—Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. 18(2), 128–30 (Feb. 1974); CPM-7407X0010

—Excitation of level complexes in Si^{28} by electron inelastic scattering —I. I. Chkalov, N. G. Shevchenko, N. G. Afanas'ev, I. I. Zalyubovskiĭ, A. A. Khomich, V. N. Polishchuk, A. S. Litvinenko, and A. Yu. Buki. 18(5), 487–9 (May 1974); CPM-7409X0597

Afanas'ev, V. D.—Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. 18(2), 128–30 (Feb. 1974); CPM-7407X0010

Agababyan, N. M.—Absorption of stopped π^- mesons by nitrogen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18 (2), 131–4 (Feb. 1974); CPM-7407X0013

—Absorption of stopped π^- mesons by oxygen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 135–7 (Feb. 1974); CPM-7407X0017

Agan'yants, A. O.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. 18(4), 420–3 (Apr. 1974); CPM-7409X0356

Akhmerov, R. V.—Determination of the form factor for the $\gamma p\Delta^+{}_{1236}$ vertex at momentum transfers up to 0.4 $(GeV/c)^2$ —Yu. I. Titov, N. F. Severin, and R. V. Akhmerov. 18(3), 276–8 (Mar. 1974); CPM-7409X0034

Akimov, V. V.—Possible behavior of the inelastic cross section of the nucleon interaction with air nuclei at energies higher than 30 GeV —V. V. Akimov, V. E. Kozlov, and V. Ya. Shestoperov. 17(5), 535–6 (Nov. 1973); CPM-7407X1119

Alebastrov, V. A.—Some physical consequences of a nonlocal quantum theory of weak interaction —V. A. Alebastrov, G. V. Efimov, and Sh. Z. Sel'tser. 18(1), 109–13 (Jan. 1974); CPM-7405F0323

Alfimenkov, V. P.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. 17 (1), 6–9 (Jul. 1973); CPM-7312F0158

—Interaction of polarized resonant neutrons with oriented nuclei —V. P. Alfimenkov, V. N. Efimov, Ts. Ts. Panteleev, and Yu. I. Fenin. 17(2), 149–52 (Aug. 1973); CPM-7406X0699

Alma-Ata—Some properties of the inclusive reaction $\pi^- p\gamma\pi^+ + \cdots$ and $\pi^- n \to \pi^+ + \cdots$ at p = 40 GeV/c —Alma-Ata. 18(3), 281–4 (Mar. 1974); CPM-7409X0039

Amirkhanov, I. V.—Real part of the spinless pp–scattering amplitude at zero angle from 0.135 to 1.700 BeV/c —I. V. Amirkhanov, V. M. Bystritskiĭ, L. S. Vertogradov, R. Ya. Zul:karneev, R. Kh. Kutuev, Kh. Murtazaev, V. S. Nadezhdin, and V. I. Satarov. 17(6), 636–7 (Dec. 1973); CPM-7408X0442

Andreev, I. V.—Proper oscillations of a classical chiral field —I. V. Andreev. 17(1), 96–7 (Jul. 1973); CPM-7312F0248

—Approximate allowance for absorptive corrections to binary hadronic reactions and the Coulomb photoproduction —I. V. Andreev and A. Ya. Ostapchuk. 18(1), 95–8 (Jan. 1974); CPM-7405F0309

Andreev, M. F.—Fission of Np^{239} in the reaction $Np^{237}(t, pf)$ —M. F. Andreev, V. V. Gladkov, V. A. Zavgorodniĭ, V. I. Serov, and V. M. Surin. 17(3), 243–5 (Sep. 1973); CPM-7406X0793

Andreev, V. N.—Study of the decay of the He^5 nucleus from the ternary fission of U^{235} induced by thermal neutrons —V. N. Andreev, V. G. Nedopekin, and V. I. Rogov. 17(5), 469–70 (Nov. 1973); CPM-7407X1053

—Emission of helium nuclei in the fragment direction following U^{235} fission by thermal neutrons —V. N. Andreev, V. G. Nedopekin, and V. I. Rogov. 18(5), 503–4 (May 1974); CPM-7409X0613

Andronenko, L. N.—Angular distributions of fragments from fission of nuclei U^{238}, Th^{232}, Bi^{209}, Re^{186} induced by protons with $T_p = 1$ GeV —A. M. Zolotov, B. A. Bochagov, L. N. Andronenko, and G. E. Solyakin. 18(1), 15–7 (Jan. 1974); CPM-7405F0229

Andryushin, V. N.—Resonance absorption of neutrinos in crystals — V. N. Andryushin. 17(2), 171–3 (Aug. 1973); CPM-7406X0721

Anh, Nguyen Tac—Production of nuclei in the reactions with Kr and Xe ions —Yu. Ts. Oganesyan, Yu. E. Penionzhkevich, Nguyen Tac Anh, D. M. Nadkarnee, K. A. Gavrilov, Kim De En, and M. Yussonua. 18(4), 377–80 (Apr. 1974); CPM-7409X0313

Anisovich, V. V.—The average multiplicities of particles in the quark model —V. V. Anisovich, M. N. Kobrinskiĭ, A. K. Likhoded, and V. M. Shekhter. 17(3), 343–4 (Sep. 1973); CPM-7406X0893

—Semi-phenomenological equations for the shadow corrections for high-energy particle–deuteron interactions —V. V. Anisovich. 17 (6), 679–80 (Dec. 1973); CPM-7408X0485

—Shadow corrections with account of inelastic screening and calculation of the total cross sections for πn, $\bar{p}n$, and K^+n collisions —V. V. Anisovich and D. A. Stoyanova. 18(2), 230–1 (Feb. 1974); CPM-7407X0112

—Is the symmetry of the quark model SU(6) or U(6) ? —V. V. Anisovich and V. M. Shekhter. 18(3), 359–60 (Mar. 1974); CPM-7409X0117

Ansel'm, A. A.—On hadron production in the virtual-photon fragmentation region —A. A. Ansel'm and D. I. D'yakonov. **18**(5), 565–9 (May 1974); CPM-7409X0675

Antipov, Y. M.—Elastic π^-p, K^-p, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. **18**(2), 182–6 (Feb. 1974); CPM-7407X0064

Antonov, R. A.—Experimental data on extensive air showers at heights 5000–12000 m —R. A. Antonov, I. P. Ivanenko, and Z. I. Tulinova. **18**(3), 285–8 (Mar. 1974); CPM-7409X0043

Arestov, Yu. I.—Properties of the proton and pion spectra for high-energy pp and πp interactions —Yu. I. Arestov, A. M. Moiseev, and K. A. Ter-Martirosyan. **17**(5), 574–5 (Nov. 1973); CPM-7407X1158

Arkhipov, A. A.—Spin effects in elastic scattering at angles near 180° —A. A. Arkhipov, V. K. Belov, and V. I. Savrin. **17**(5), 579–82 (Nov. 1973); CPM-7407X1163

Artemov, K. P.—An investigation of three-particle decays of Li^6 —K. P. Artemov, V. Z. Gol'dberg, I. P. Petrov, V. P. Rudakov, I. N. Serikov, and V. A. Timofeev. **17**(2), 115–6 (Aug. 1973); CPM-7406X0665

Artyukh, A. G.—Direct reactions in the interaction of Ne^{22} with Th^{232} —A. G. Artyukh, J. Wilczynski, V. V. Volkov, G. F. Gridnev, and V. L. Mikheev. **17**(6), 586–9 (Dec. 1973); CPM-7408X0392

Ascoli, G.—Elastic π^-p, K^-p, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. **18**(2), 182–6 (Feb. 1974); CPM-7407X0064

Asratyan, A. É.—Intermediate-particle production in the renormalizable theory of the weak interaction —A. É. Asratyan and E. P. Shabalin. **18**(1), 87–9 (Jan. 1974); CPM-7405F0301

Avdeeva, G. M.—The possible existence of a finite charge in quantum field theory —G. M. Avdeeva, A. A. Belavin, and A. P. Protogenov. **18**(6), 671–4 (Jun. 1974); CPM-7409X0505

Aver'yanov, I. K.—Distribution of nuclear matter —I. K. Aver'yanov, A. A. Sadovoĭ, N. M. Chulkov, and L. L. Vakhlamova. **17**(2), 132–3 (Aug. 1973); CPM-7406X0682

Azaryan, M. O.—Inelasticity of interactions of 1–10 TeV nucleons with lead nuclei —M. O. Azaryan and É. A. Mamudzhanyan. **17** (3), 289–90 (Sep. 1973); CPM-7406X0839

—Measurement of the total nucleon inelasticity coefficient in the interaction with iron nuclei —M. O. Azaryan, É. A. Mamidzhanyan, and R. A. Suleĭmanov. **17**(3), 291–2 (Sep. 1973); CPM-7406X0841

Aznauryan, I. G.—High-energy contributions to the dispersion integrals, the isotensor electromagnetic current and the data on π^+ photoproduction from threshold to 450 MeV —I. G. Aznauryan and A. N. Zaslavskiĭ. **17**(2), 191–5 (Aug. 1973); CPM-7406X0741

B

Babaev, Z. R.—Continuous moment sum rules —Z. R. Babaev and V. S. Zamiralov. **17**(5), 576–8 (Nov. 1973); CPM-7407X1160

—On the analysis of the reaction $\pi^-p \to \pi^0n$ at high energies —Z. R. Babaev, V. S. Zamiralov, and S. V. Tarasevich. **18**(2), 214–6 (Feb. 1974); CPM-7407X0096

Badalyan, A. M.—Asymptotic behavior of the wave function for three particles —A. M. Badalyan and Yu. A. Simonov. **17**(2), 225–31 (Aug. 1973); CPM-7406X0775

—Equations for three-particle resonance wave function —Yu. A. Simonov and A. M. Badalyan. **18**(1), 38–40 (Jan. 1974); CPM-7405F0252

Badica, T.—Angular $\gamma\gamma$-correlations in In^{115} —T. Badica, A. Gelberg, S. Dima, I. Popescu, and C. Chortea. **17**(4), 345–7 (Oct. 1973); CPM-7407X0125

Bakiev, S. A.—The 0^+ levels in Xe^{130} —S. A. Bakiev, K. A. Baskova, S. S. Vasil'ev, M. A. Mokhsen, A. A. Sorokin, and T. V. Chugai. **18**(2), 119–21 (Feb. 1974); CPM-7407X0001

Baldin, A. M.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov, H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskiĭ, and M. I. Yatsuta. **18**(1), 41–4 (Jan. 1974); CPM-7405F0255

Baloshin, O. N.—The charge-exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. **18**(3), 279–80 (Mar. 1974); CPM-7409X0037

Barashenkov, V. S.—Elastic interactions of high-energy helium ions with atomic nuclei —V. S. Barashenkov, K. K. Gudima, F. G. Zheregi, A. S. Il'inov, and V. D. Toneev. **17**(2), 221–4 (Aug. 1973); CPM-7406X0771

—Energy dependence of the ratio Γ_n/Γ_f for transuranium elements — V. S. Barashenkov, F. G. Zhereghi, A. S. Il'inov, and V. D. Toneev. **18**(1), 20 (Jan. 1974); CPM-7405F0234

—Analysis of inelastic collisions of superhigh-energy particles with nuclei —V. S. Barashenkov and S. M. Eliseev. **18**(1), 102–4 (Jan. 1974); CPM-7405F0316

Barmin, V. V.—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 633–4 (Jun. 1974); CPM-7409X0467

Barylov, V. G.—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 633–4 (Jun. 1974); CPM-7409X0467

Baskova, K. A.—The 0^+ levels in Xe^{130} —S. A. Bakiev, K. A. Baskova, S. S. Vasil'ev, M. A. Mokhsen, A. A. Sorokin, and T. V. Chugai. **18**(2), 119–21 (Feb. 1974); CPM-7407X0001

Basova, B. G.—Fission of U^{233} and U^{235} by thermal neutrons —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. **18**(4), 364–8 (Apr. 1974); CPM-7409X0300

—Spontaneous fission of Cf^{252} —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. **18**(6), 589–93 (Jun. 1974); CPM-7409X0423

Batkin, I. S.—Internal brehmsstrahlung accompanying electron capture in Cl^{36} —Yu. G. Smirnov and I. S. Batkin. **18**(2), 122–4 (Feb. 1974); CPM-7407X0004

Batusov, Yu. A.—Inelastic π^+p interactions at energy 230 MeV — Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, and V. M. Sidorov. **18**(1), 45–8 (Jan. 1974); CPM-7405F0259

—Absorption of stopped π^- mesons by nitrogen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. **18**(2), 131–4 (Feb. 1974); CPM-7407X0013

—Absorption of stopped π^- mesons by oxygen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. **18**(2), 135–7 (Feb. 1974); CPM-7407X0017

—π^+-meson double charge exchange on Bi^{209} nuclei —Yu. A. Batusov, Z. Ganzorig, I. V. Dudova, B. P. Osipenko, V. M. Sidorov, V. A. Khalkin, and D. Chultém. **18**(3), 250–2 (Mar. 1974); CPM-7409X0008

—The reaction $\pi^-p \to \pi^+\pi^-n$ near threshold —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, V. S. Kurbatov, V. M. Sidorov, and V. A. Yarba. **18**(4), 426–9 (Apr. 1974); CPM-7409X0362

—Emission of charged particles in capture of negative muons by emulsion nuclei —Yu. A. Batusov, S. A. Bunyatov, L. Vizireva, G. R. Gulkanyan, F. Mirsalikhova, and V. M. Sidorov. **18**(5), 496–8 (May 1974); CPM-7409X0606

Bayukov, Yu. D.—Experimental study of the mechanism of the reaction $Li^6(\pi^-, \pi^- p)He^5$ —Yu. D. Bayukov, L. S. Vorob'ev, V. M. Kolybasov, G. A. Leksin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 17(5), 479–83 (Nov. 1973); CPM-7407X1063

—Scaling invariance effects in proton–nucleus backward scattering in the few-GeV energy range– Yu. D. Bayukov, L. S. Vorob'ev, G. A. Lesin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 18(6), 639–40 (Jun. 1974)

Baznat, M.—One–nucleon transfer reactions to quasi–intersecting levels 1/2+ [660] and 1/2+[400], 3/2+[651] and 3/2+[402] —F. A. Gareev, M. Baznat, H. J. Wiebicke, and H. Schulz. 17(4), 397–401 (Oct. 1973); CPM-7407X0177

Baznat, M. I.—Effect of the Coriolis force on E1 transitions between rotational bands —M. I. Baznat and N. I. Pyatov. 18(4), 391–4 (Apr. 1974); CPM-7409X0327

Belavin, A. A.—The possible existence of a finite charge in quantum field theory —G. M. Avdeeva, A. A. Belavin, and A. P. Protogenov. 18(6), 671–4 (Jun. 1974); CPM-7409X0505

Beloozerov, N. N.—Method of smoothly varying angular functions in the three–body problem —N. N. Beloozerov. 17(6), 605–8 (Dec. 1973); CPM-7408X0411

Belousov, A. S.—Study of electron–photon showers in lead in the 150–550 MeV energy region —A. S. Belousov, E. I. Malinovskiĭ, S. V. Russkov, V. V. Samedov, and P. N. Shareiko. 17(5), 537–9 (Nov. 1973); CPM-7407X1121

Belousov, V. I.—Measurement of the $K^- p \to \bar{K}^0 n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. 17(6), 638–40 (Dec. 1973); CPM-7408X0444

Belov, A. G.—Search for α emission in the decay of spontaneously fissionable isomers —A. G. Belov, Yu. P. Gangrskiĭ, B. Dalkhsuren, A. M. Kucher, and Nguen Kong Khan. 17(5), 493–5 (Nov. 1973); CPM-7407X1077

Belov, V. K.—Spin effects in elastic scattering at angles near 180° —A. A. Arkhipov, V. K. Belov, and V. I. Savrin. 17(5), 579–82 (Nov. 1973); CPM-7407X1163

Belyaev, S. T.—Rotational excitation of nuclei in the method of the generalized density matrix —S. T. Belyaev and V. G. Zelevinskiĭ. 17(3), 269–76 (Sep. 1973); CPM-7406X0819

Belyaev, V. B.—Approximate methods for the solution of the three–nucleon problem at positive energies —V. B. Belyaev, V. N. Efimov, E. G. Tkachenko[1], and H. Schulz. 18(4), 401–4 (Apr. 1974); CPM-7409X0337

Benetskiĭ, B. A.—Interaction of neutrons of energy 13–17 MeV with lead isotopes —B. A. Benetskiĭ, B. B. Nefedov, I. M. Frank, and I. V. Shtranikh. 17(1), 10–1 (Jul. 1973); CPM-7312F0162

Beresnev, V. I.—Investigation of the depth–intensity curve of the nuclear events induced by cosmic–ray muons —L. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, O. G. Ryazhskaya, and L. N. Stepanets. 17(1), 51–3 (Jul. 1973); CPM-7312F0203

Berezhnev, S. F.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^- p \to e^+ e^- n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 17(1), 44–8 (Jul. 1973); CPM-7312F0196

—Measurement of the pion and nucleon form factors at the Timelike four–momentum Transfers $k^2 \approx 1.7$, 2.2, and 2.9 F^{-2} —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 18(1), 53–6 (Jan. 1974); CPM-7405F0267

Beznogikh, G. G.—Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. 18(2), 179–81 (Feb. 1974); CPM-7407X0061

Bezrukov, L. B.—Investigation of the depth–intensity curve of the nuclear events induced by cosmic–ray muons —L. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, O. G. Ryazhskaya, and L. N. Stepanets. 17(1), 51–3 (Jul. 1973); CPM-7312F0203

Bien, Truong—Determination of the deuteron form factor from the experimental data on elastic pd, pp, and np small–angle scattering in the energy range 10–26 GeV —L. S. Zolin, V. A. Nikitin, Truong Bien, and M. G. Shafranova. 18(1), 30–2 (Jan. 1974); CPM-7405F0244

—Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. 18 (2), 179–81 (Feb. 1974); CPM-7407X0061

Birger, E. S.—Bound quasinuclear states of the system 2N2$\bar{N}$ —E. S. Birger, B. O. Kerbikov, N. B. Konyukhova, and I. S. Shapiro. 17 (1), 92–5 (Jul. 1973); CPM-7312F0244

Blagorodov, A. M.—The charge–exchange reaction $K^- p \to \bar{K}^0 n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Blokhintsev, D. I.—"Elementary length" and the Mossbauer effect —D. I. Blokhintsev. 17(4), 433–6 (Oct. 1973); CPM-7407X0213

Bochagov, B. A.—Angular distribution of neutrons from the ternary fissions of Cf^{252} nuclei —A. P. Graevskiĭ, B. A. Bochagov, and Yu. A. Chestov. 17(4), 366–7 (Oct. 1973); CPM-7407X0146

—An investigation of the fission of U^{238} and Bi^{209} by 1–GeV protons —A. A. Kotov, G. G. Semenchuk, B. A. Bochagov, B. L. Gorshkov, G. G. Kovshevnyĭ, V. R. Reznik, and G. E. Solyakin. 17(5), 498–501 (Nov. 1973); CPM-7407X1082

—Angular distributions of fragments from fission of nuclei U^{238}, Th^{232}, Bi^{209}, Re^{186} induced by protons with $T_p = 1$ GeV —A. M. Zolotov, B. A. Bochagov, L. N. Andronenko, and G. E. Solyakin. 18(1), 15–7 (Jan. 1974); CPM-7405F0229

Bogatin, V. I.—Isotope effect in nuclear reactions with high–energy particles —V. I. Bogatin, V. K. Bondarev, V. F. Litvin, O. V. Lozhkin, N. A. Perfilov, and Yu. P. Yakovlev. 17(1), 4–5 (Jul. 1973); CPM-7312F0156

Bogdanov, D. D.—Measurement of coincidences between positrons and delayed protons for Te^{109} —D. D. Bogdanov, V. A. Karnaukhov, and L. A Petrov. 17(3), 233–5 (Sep. 1973); CPM-7406X0783

—Fine structure of delayed proton spectrum —V. A. Karnaukhov, D. D. Bogdanov, and L. A. Petrov. 17(5), 465–8 (Nov. 1973); CPM-7407X1049

—Delayed protons from Te^{109} and the β–decay strength function —D. D. Bogdanov, V. A. Karnaukhov, and L. A. Petrov. 18(1), 1–5 (Jan. 1974); CPM-7405F0215

Bogomol', E. B.—Renormalizable models of the weak interaction and the neutral scalar meson —E. B. Bogomol'. 18(3), 297–301 (Mar. 1974); CPM-7409X0055

Bogomol'nyĭ, E. B.—Cross sections of inelastic weak processes in lepton–lepton colliding beams —E. B. Bogomol'nyĭ, N. N. Nikolaev, and V. A. Novikov. 17(4), 425–7 (Oct. 1973); CPM-7407X0205

Boldyshev, V. F.—Radiative capture of protons by Zn^{64}, Zn^{66}, and Zn^{68} nuclei —B. A. Nemashkalo, V. E. Storizhko, V. F. Boldyshev, O. I. Ekhichev, A. P. Klyucharev, and A. I. Popov. 17(2), 117–9 (Aug. 1973); CPM-7406X0667

Bolonkin, B. V.—The charge–exchange reaction $K^- p \to \bar{K}^0 n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Bolotov, V. N.—Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kaksuridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. 18(5), 538–45 (May 1974); CPM-7409X0648

—An investigation of $K^- p \to \bar{K}^0 n$ charge exchange at 25 and 35 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, V. E. Postoev, Yu. D. Prokoshkin, and V. K. Semenov. 18(5), 546–50 (May 1974); CPM-7409X0656

—The reaction $\pi^- p \to \eta^0 n$ in the momentum region up to 50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, Yu. D. Prokoshkin, E. A. Razuvaev, and V. K. Semenov. 18(6), 648–51 (Jun. 1974); CPM-7409X0482

Bom, Zen Chang—Search for a spontaneously fissioning isomer nucleus U^{236m} in the reaction $U^{235}(n, \gamma)$ —Zen Chang Bom, A. Laitay, A. A. Omelyanenko, Ts. Ts. Panteleev, S. M. Polikanov, Yu. V. Ryabov, and Tang San Khak. **18**(1), 18–9 (Jan. 1974); CPM-7405F0232

Bondarev, V. K.—Isotope effect in nuclear reactions with high-energy particles —V. I. Bogatin, V. K. Bondarev, V. F. Litvin, O. V. Lozhkin, N. A. Perfilov, and Yu. P. Yakovlev. **17**(1), 4–5 (Jul. 1973); CPM-7312F0156

Boos, É. G.—Analysis of reactions $pp \to NN2\pi$ and $pp \to NN3\pi$ at the incident proton momentum 19.1 GeV/c —Zh. S. Takibaev, É. G. Boos, L. A. Sanko, K. G. Zaĭtsev, and K. P. Sharapov. **18** (1), 49–52 (Jan. 1974); CPM-7405F0263

Boreskov, K. G.—Elastic πN scattering and backward charge exchange with allowance for the cut contribution —K. G. Boreskov, K. A. Ter-Martirosyan, and I. S. Tsukerman. **17**(4), 442–4 (Oct. 1973); CPM-7407X0222

—Regge parametrization of the $\pi\pi$ scattering amplitudes. description of the reaction $\pi^- p \to \pi^- \pi^+ n$ by the OPER model —K. G. Boreskov, A. B. Kaĭdalov, and L. A. Ponomarev. **17**(6), 669–74 (Dec. 1973); CPM-7408X0475

Budapest—Production of γ quanta in $\pi^- N$ interactions at 40 GeV/c —Budapest. **17**(6), 644–8 (Dec. 1973); CPM-7408X0450

Budnik, A. P.—Properties of Sm^{150} in the phenomenological collective model —A. P. Budnik and A. A. Seregin. **18**(3), 255–7 (Mar. 1974); CPM-7409X0013

Bugaev, E. V.—Cross sections of the deep inelastic processes $\nu + p \to l^- + l^+ + l^- +$ hadrons —E. V. Bugaev, V. I. Gurentsov, G. V. Domogatskiĭ, and I. M. Zheleznykh. **17**(5), 558–60 (Nov. 1973); CPM-7407X1142

Bugrii, A. I.—Large-angle scattering in the "DAMA" model —A. I. Bugrii, L. L. Jenkovszky, and N. A. Kobylinskii. **17**(3), 319–21 (Sep. 1973); CPM-7406X0869

Bujak, A.—Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. **18**(2), 179–81 (Feb. 1974); CPM-7407X0061

Buki, A. Yu.—Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. **18**(2), 128–30 (Feb. 1974); CPM-7407X0010

—Excitation of level complexes in Si^{28} by electron inelastic scattering —I. I. Chkalov, N. G. Shevchenko, N. G. Afanas'ev, I. I. Zalyubovskiĭ, A. A. Khomich, V. N. Polishchuk, A. S. Litvinenko, and A. Yu. Buki. **18**(5), 487–9 (May 1974); CPM-7409X0597

Buklanov, G. V.—Prompt neutrons in the spontaneous fission of Cf^{246} —M. Dakovskiĭ, Yu. A. Lazarev, Yu. Ts. Oganesyan, and G. V. Buklanov. **17**(4), 360–1 (Oct. 1973); CPM-7407X0140

Bulgakov, M. I.—T-invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. **18**(1), 6–9 (Jan. 1974); CPM-7405F0220

Bunatyan, G. G.—Variations of the energy of the ground state of finite fermi systems and nuclear masses —G. G. Bunatyan. **17**(1), 15–21 (Jul. 1973); CPM-7312F0167

Bunyatov, S. A.—Determination of the $\pi\pi$ scattering length a_0 from the analysis of experimental data on τ decay —S. A. Bunyatov, G. R. Gulkanyan, and V. S. Kurbatov. **17**(6), 681–2 (Dec. 1973); CPM-7408X0487

—Inelastic $\pi^+ p$ interactions at energy 230 MeV —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, and V. M. Sidorov. **18**(1), 45–8 (Jan. 1974); CPM-7405F0259

—Absorption of stopped π^- mesons by nitrogen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. **18**(2), 131–4 (Feb. 1974); CPM-7407X0013

—Absorption of stopped π^- mesons by oxygen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. **18**(2), 135–7 (Feb. 1974); CPM-7407X0017

—The reaction $\pi^- p \to \pi^+ \pi^- n$ near threshold —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, V. S. Kurbatov, V. M. Sidorov, and V. A. Yarba. **18**(4), 426–9 (Apr. 1974); CPM-7409X0362

—Emission of charged particles in capture of negative muons by emulsion nuclei —Yu. A. Batusov, S. A. Bunyatov, L. Vizireva, G. R. Gulkanyan, F. Mirsalikhova, and V. M. Sidorov. **18**(5), 496–8 (May 1974); CPM-7409X0606

Busnello, R.—Elastic $\pi^- p$, $K^- p$, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. **18**(2), 182–6 (Feb. 1974); CPM-7407X0064

Buyak, A.—Possible spin effects in pp scattering at high energies and the $X^0(960)$ meson —A. Buyak, A. N. Zaslavskiĭ[1], V. I. Ogievetskiĭ, and A. T. Filippov. **18**(4), 462–4 (Apr. 1974); CPM-7409X0398

Bychenkov, V. S.—Cross section and angular anisotropy of fission of U^{238}, Bi^{209}, $Pb^{208-206}$, and Au^{197} by 70–200 MeV protons —V. S. Bychenkov, M. F. Lomanov, A. I. Obukhov, N. A. Perfilov, O. E. Shigaev, G. G. Shimchuk, and R. M. Yakovlev. **17**(5), 496–7 (Nov. 1973); CPM-7407X1080

Bystritskiĭ, V. M.—Real part of the spinless pp-scattering amplitude at zero angle from 0.135 to 1.700 BeV/c —I. V. Amirkhanov, V. M. Bystritskiĭ, L. S. Vertogradov, R. Ya. Zul:karneev, R. Kh. Kutuev, Kh. Murtazaev, V. S. Nadezhdin, and V. I. Satarov. **17**(6), 636–7 (Dec. 1973); CPM-7408X0442

C

Cheblukov, Yu. N.—Neutron polarization in the reaction $Be^9(\alpha, n)C^{12}$ —V. V. Okorokov, V. M. Serezhin, V. A. Smotryaev, D. L. Tolchenkov, I. S. Trostin, and Yu. N. Cheblukov. **17**(4), 352–3 (Oct. 1973); CPM-7407X0132

Chechenin, N. G.—Lifetime of the compound nucleus U^{239} produced in the $U^{238}+n$ reaction with 1.6–4.3 MeV neutrons —P. E. Vorotnikov, Yu. V. Melikov, Yu. D. Otstavnov, A. F. Tulinov, and N. G. Chechenin. **17**(5), 471–3 (Nov. 1973); CPM-7407X1055

Cherdantsev, P. A.—Shell effects in an excited fissile nucleus —G. D. Adeev and P. A. Cherdantsev. **18**(4), 381–5 (Apr. 1974); CPM-7409X0317

Chernavskiĭ, D. S.—Multiperipheral theory of the interaction of hadrons at high energies: the $\pi\pi$ interaction —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roizen, and D. S. Chernavskiĭ. **17** (2), 208–15 (Aug. 1973); CPM-7406X0758

—Multiperipheral theory of particle interaction at high energies. πN and NN interactions —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roizen, and D. S. Chernavskiĭ. **18**(2), 226–9 (Feb. 1974); CPM-7407X0108

Chernev, Kh. M.—Absorption of stopped π^- mesons by nitrogen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. **18** (2), 131–4 (Feb. 1974); CPM-7407X0013

—Absorption of stopped π^- mesons by oxygen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. **18**(2), 135–7 (Feb. 1974); CPM-7407X0017

—Slope parameter for pp elastic scattering in the region of the Coulomb interference —Kh. M. Chernev. **18**(2), 208–9 (Feb. 1974); CPM-7407X0090

Chernov, I. P.—Back scattering of α particles by C^{12} and C^{13} —B. I. Kuznetsov, I. P. Chernov, and R. E. Ovsyannikova. **18**(5), 490–1 (May 1974); CPM-7409X0600

Chestov, Yu. A.—Angular distribution of neutrons from the ternary fissions of Cf^{252} nuclei —A. P. Graevskiĭ, B. A. Bochagov, and Yu. A. Chestov. **17**(4), 366–7 (Oct. 1973); CPM-7407X0146

Chistyakov, L. V.—Variation of mass distribution of Th^{232} fission fragments with neutron energy —S. M. Dubrovina, V. I. Novgorodtseva, L. N. Morozov, V. A. Pchelin, L. V. Chistyakov, V. A. Shigin, and V. M. Shubko. **17**(3), 240–2 (Sep. 1973); CPM-7406X0790

Chistyakova, T. A.—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 633–4 (Jun. 1974); CPM-7409X0467

Chkalov, I. I.—Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. 18(2), 128–30 (Feb. 1974); CPM-7407X0010

—Excitation of level complexes in Si^{28} by electron inelastic scattering —I. I. Chkalov, N. G. Shevchenko, N. G. Afanas'ev, I. I. Zalyubovskiĭ, A. A. Khomich, V. N. Polishchuk, A. S. Litvinenko, and A. Yu. Buki. 18(5), 487–9 (May 1974); CPM-7409X0597

Chortea, C.—Angular $\gamma\gamma$–correlations in In^{115} —T. Badica, A. Gelberg, S. Dima, I. Popescu, and C. Chortea. 17(4), 345–7 (Oct. 1973); CPM-7407X0125

Chubukov, I. Ya.—Giant–resonance photodeuterons from N^{15} —V. P. Denisov and I. Ya. Chubukov. 17(4), 354–5 (Oct. 1973); CPM-7407X0134

Chugai, T. V.—The 0^+ levels in Xe^{130} —S. A. Bakiev, K. A. Baskova, S. S. Vasil'ev, M. A. Mokhsen, A. A. Sorokin, and T. V. Chugai. 18(2), 119–21 (Feb. 1974); CPM-7407X0001

Chulkov, N. M.—Distribution of nuclear matter —I. K. Aver'yanov, A. A. Sadovoĭ, N. M. Chulkov, and L. L. Vakhlamova. 17(2), 132–3 (Aug. 1973); CPM-7406X0682

Chultém, D.—π^+–meson double charge exchange on Bi^{209} nuclei —Yu. A. Batusov, Z. Ganzorig, I. V. Dudova, B. P. Osipenko, V. M. Sidorov, V. A. Khalkin, and D. Chultém. 18(3), 250–2 (Mar. 1974); CPM-7409X0008

Chuvilo, I. V.—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 633–4 (Jun. 1974); CPM-7409X0467

Coz, Marcel—Distortion effects in equivalent local potentials —Marcel Coz and John K. Munro Jr. 17(4), 368–75 (Oct. 1973); CPM-7407X0148

D

Dakovskiĭ, D. M.—Prompt–neutron multiplicity in spontaneous fission —D. M. Dakovskiĭ, Yu. A. Lazarev, and Yu. Ts. Oganesyan. 18(4), 371–6 (Apr. 1974); CPM-7409X0307

Dakovskiĭ, M.—Prompt neutrons in the spontaneous fission of Cf^{246} —M. Dakovskiĭ, Yu. A. Lazarev, Yu. Ts. Oganesyan, and G. V. Buklanov. 17(4), 360–1 (Oct. 1973); CPM-7407X0140

Dal'karov, O. D.—Spectrum of gamma quanta produced from the annihilation of stopped $\bar{p}$ in hydrogen —O. D. Dal'karov, V. M. Samoĭlov, and I. S. Shapiro. 17(5), 566–8 (Nov. 1973); CPM-7407X1150

—Baryon resonances of the quasi–nuclear type —O. D. Dal'karov, B. O. Kerbikov, I. A. Rumyantsev, and I. S. Shapiro. 17(6), 688–92 (Dec. 1973); CPM-7408X0494

—Isobar mechanism of pion double charge exchange at high energy —O. D. Dal'karov and V. M. Kolybasov. 18(4), 416–9 (Apr. 1974); CPM-7409X0352

Dalkhsuren, B.—Search for α emission in the decay of spontaneously fissionable isomers —A. G. Belov, Yu. P. Gangrskiĭ, B. Dalkhsuren, A. M. Kucher, and Nguen Kong Khan. 17(5), 493–5 (Nov. 1973); CPM-7407X1077

Damgaard, G.—Elastic π^-p, K^-p, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. 18(2), 182–6 (Feb. 1974); CPM-7407X0064

Danagulyan, A. S.—Photospallation of nuclei in the energy region from 2 to 4.5 BeV —G. A. Vartapetyan, A. S. Danagulyan, N. A. Demëkhina, and A. G. Khudaverdyan. 17(4), 356–9 (Oct. 1973); CPM-7407X0136

Danilov, G. S.—Circular polarization of γ quanta in the reaction $n+p \to d+\gamma$ and the weak P–odd NNp vertex —G. S. Danilov. 17 (5), 549–54 (Nov. 1973); CPM-7407X1133

Danilyan, G. V.—T–invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. 18(1), 6–9 (Jan. 1974); CPM-7405F0220

Davidenko, G. V.—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 633–4 (Jun. 1974); CPM-7409X0467

Dedushev, V. S.—ρ dominance and bootstrap of the $\pi\pi$ system —A. N. Vall, V. S. Dedushev, and V. V. Serebryakov. 17(1), 66–9 (Jul. 1973); CPM-7312F0218

De En, Kim—Production of nuclei in the reactions with Kr and Xe ions —Yu. Ts. Oganesyan, Yu. E. Penionzhkevich, Nguyen Tac Anh, D. M. Nadkarnee, K. A. Gavrilov, Kim De En, and M. Yussonua. 18(4), 377–80 (Apr. 1974); CPM-7409X0313

Deka, G. S.—Certain characteristics of decays produced in emulsion nuclei by 70 GeV/c protons —G. S. Deka, K. Pathak, and H. K. Sarma. 17(3), 341–2 (Sep. 1973); CPM-7406X0891

Demëkhina, N. A.—Photospallation of nuclei in the energy region from 2 to 4.5 BeV —G. A. Vartapetyan, A. S. Danagulyan, N. A. Demëkhina, and A. G. Khudaverdyan. 17(4), 356–9 (Oct. 1973); CPM-7407X0136

—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. 18(4), 420–3 (Apr. 1974); CPM-7409X0356

Dementiĭ, S. V.—Inelastic electromagnetic form factors of K^{39} and Ca^{40} —V. G. Vlasenko, N. G. Afanas'ev, V. A. Gol'dshtein , S. V. Dementiĭ, E. L. Kuplennikov, V. I. Ogurtsov, and V. I. Startsev. 17(6), 585 (Dec. 1973); CPM-7408X0391

Demidov, V. S.—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 633–4 (Jun. 1974); CPM-7409X0467

Demidovich, N. N.—Range and energy loss of Pu^{238} α particles in certain gases —I. E. Nakhutin and N. N. Demidovich. 17(6), 649–53 (Dec. 1973); CPM-7408X0455

—Energy–loss and range straggling of α particles from Pu^{239} in some gases —N. N. Demidovich, I. E. Nakhutin, and V. G. Shatunov. 18(1), 70–3 (Jan. 1974); CPM-7405F0284

Dem'yanov, A. V.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^-p \to e^+e^-n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 17(1), 44–8 (Jul. 1973); CPM-7312F0196

—Measurement of the pion and nucleon form factors at the Timelike four–momentum Transfers $k^2 = 1.7$, 2.2, and 2.9 F^{-2} —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 18(1), 53–6 (Jan. 1974); CPM-7405F0267

Denisov, S. P.—Differences between the total cross sections at momenta up to 65 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. **17**(2), 157–65 (Aug. 1973); CPM-7406X0707
—Nuclear absorption cross sections for pions, kaons, protons, and antiprotons in the momentum range 6–60 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, R. N. Krasnokutskiĭ, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. **18**(2), 173–8 (Feb. 1974); CPM-7407X0055
Denisov, V. P.—Giant-resonance photodeuterons from N^{15} —V. P. Denisov and I. Ya. Chubukov. **17**(4), 354–5 (Oct. 1973); CPM-7407X0134
Derebchinskiĭ, A. I.—Dependence of the yield of pions and protons emitted at $\theta_{lab}=90°$ at $E_\gamma^{max}=400$ MeV on the mass number of the nucleus —N. V. Goncharov, A. I. Derebchinskiĭ, O. G. Konovalov, S. G. Tonapetyan, and V. M. Khovorostyan. **17**(2), 124–7 (Aug. 1973); CPM-7406X0674
Derkach, L. M.—Determination of the degree of polarization of coherent bremsstrahlung from a diamond single crystal —V. G. Gorbenko, L. M. Derkach, Yu. V. Zhebrovskiĭ, L. Ya. Kolesnikov, and A. L. Rubashkin. **17**(4), 413–6 (Oct. 1973); CPM-7407X0193
Devenski, P. A.—Elastic pd scattering at 5 GeV in the coulomb–nuclear interference region —Z. M. Zlatanov, L. G. Kristov, and P. A. Devenski. **17**(1), 49–50 (Jul. 1973); CPM-7312F0201
Dima, S.—Angular $\gamma\gamma$-correlations in In^{115} —T. Badica, A. Gelberg, S. Dima, I. Popescu, and C. Chortea. **17**(4), 345–7 (Oct. 1973); CPM-7407X0125
Dmitrevskiĭ, Yu. P.—Measurement of the $K^-p \to \bar{K}^0n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. **17**(6), 638–40 (Dec. 1973); CPM-7408X0444
Dmitriev, V. F.—Electroproduction of π^--mesic atoms —V. F. Dmitriev. **17**(4), 417–9 (Oct. 1973); CPM-7407X0197
Dmitrieva, T. A.—$\alpha\gamma$ angular correlations in inelastic scattering of α particles —T. A. Dmitrieva, N. S. Zelenskaya, A. A. Elkamhavi, and I. B. Teplov. **18**(6), 626–30 (Jun. 1974); CPM-7409X0460
Doktorov, E. V.—Scattering of light by a charge in an external electromagnetic field —E. V. Doktorov, I. A. Malkin, and V. I. Man'ko. **18**(1), 74–8 (Jan. 1974); CPM-7405F0288
Dolgolenko, A. G.—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 631–2 (Jun. 1974); CPM-7409X0465
—Search for $K_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 633–4 (Jun. 1974); CPM-7409X0467
Dolgov, A. D.—The introduction of additional gauge fields into the Weinberg model —A. D. Dolgov, V. I. Zakharov, and L. B. Okun'. **18**(4), 452–9 (Apr. 1974); CPM-7409X0388
Domogatskiĭ, G. V.—Cross sections of the deep inelastic processes $\nu+p \to l^-+l^++l^-+$ hadrons —E. V. Bugaev, V. I. Gurentsov, G. V. Domogatskiĭ, and I. M. Zheleznykh. **17**(5), 558–60 (Nov. 1973); CPM-7407X1142
Donichkin, A. G.—The spectra of the fission x-rays at different kinetic energies of the light fragment and the "fine" structure of the mass yield —A. G. Donichkin, S. M. Solov'ev, and V. P. Éĭsmont. **17**(5), 489–92 (Nov. 1973); CPM-7407X1073
—Time of x-ray emission by fragments fission with definite charged —A. G. Donichkin, S. M. Solov'ev, and V. P. Éĭsmont. **18**(2), 138–41 (Feb. 1974); CPM-7407X0020
Donskov, S. V.—Differences between the total cross sections at momenta up to 65 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. **17**(2), 157–65 (Aug. 1973); CPM-7406X0707
—Nuclear absorption cross sections for pions, kaons, protons, and antiprotons in the momentum range 6–60 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, R. N. Krasnokutskiĭ, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. **18**(2), 173–8 (Feb. 1974); CPM-7407X0055
Dotsenko, I. S.—The theory of diffraction scattering —A. G. Sitenko and I. S. Dotsenko. **17**(1), 35–8 (Jul. 1973); CPM-7312F0187
—Elastic and inelastic scattering of fast nucleons and the cluster structure of Li^6 —I. S. Dotsenko and A. D. Fursa. **17**(4), 402–7 (Oct. 1973); CPM-7407X0182
—Diffraction scattering of protons by the deformed nucleus C^{12} —I. S. Dotsenko and A. D. Fursa. **17**(4), 408–10 (Oct. 1973); CPM-7407X0188
Dremin, I. M.—Multiperipheral theory of the interaction of hadrons at high energies: the $\pi\pi$ interaction —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roĭzen, and D. S. Chernavskiĭ. **17**(2), 208–15 (Aug. 1973); CPM-7406X0758
—Multiperipheral theory of particle interaction at high energies. πN and NN interactions —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roĭzen, and D. S. Chernavskiĭ. **18**(2), 226–9 (Feb. 1974); CPM-7407X0108
—Similarity of properties of photons and pions and production of pions with large transverse momenta —I. M. Dremin. **18**(3), 318–20 (Mar. 1974); CPM-7409X0076
Drukarev, E. G.—Contribution to the theory of the internal Compton effect —E. G. Drukarev. **17**(2), 174–9 (Aug. 1973); CPM-7406X0724
Dubna—Production of neutral strange particles in π^-p, π^-n, and π^-C interactions at 40 GeV/c —Dubna. **18**(6), 642–7 (Jun. 1974); CPM-7409X0476
Dubovoĭ, E. I.—Correspondence between the irregularities of triangle Feynman diagrams and the masses of negative-strangeness baryon resonances —E. I. Dubovoĭ and V. P. Yakovenko. **17**(5), 569–73 (Nov. 1973); CPM-7407X1153
Dubrovina, S. M.—Variation of mass distribution of Th^{232} fission fragments with neutron energy —S. M. Dubrovina, V. I. Novgorodtseva, L. N. Morozov, V. A. Pchelin, L. V. Chistyakov, V. A. Shigin, and V. M. Shubko. **17**(3), 240–2 (Sep. 1973); CPM-7406X0790
Duc, Dao Vong—Scale dimensionality of the axial current and the $\sigma\pi\pi$ vertex —Dao Vong Duc. **18**(1), 99–101 (Jan. 1974); CPM-7405F0313
Dudkin, V. E.—Secondary particles produced in interactions of multiply-charged relativistic nuclei with emulsion nuclei —V. E. Dudkin, Yu. V. Potapov, Z. S. Khokhlova, N. S. Shimanskaya, and R. M. Yakovlev. **18**(2), 193–4 (Feb. 1974); CPM-7407X0075
Dudova, I. V.—π^+-meson double charge exchange on Bi^{209} nuclei —Yu. A. Batusov, Z. Ganzorig, I. V. Dudova, B. P. Osipenko, V. M. Sidorov, V. A. Khalkin, and D. Chultém. **18**(3), 250–2 (Mar. 1974); CPM-7409X0008
Dukhovskoĭ, I. A.—Study of the backward ρ^-meson production in the reaction $\pi^-p \to p\rho^-$ in the primary-momentum range 1.80–3.25 GeV/c —V. V. Vladimirskiĭ, R. I. Dzhelyadin, I. A. Dukhovskoĭ, V. V. Kishkurno, A. P. Krutenkova, V. V. Kulikov, I. A. Radkevich, and V. S. Fedorets. **17**(4), 411–2 (Oct. 1973); CPM-7407X0191
Dumbrais, O. V.—Possibility of determining the $\pi^-He^3H^3$ coupling —O. V. Dumbrais, F. Nikitiu, and Yu. A. Shcherbakov. **18**(2), 168–70 (Feb. 1974); CPM-7407X0050
Dunaevskiĭ, A. M.—Multiperipheral theory of the interaction of hadrons at high energies: the $\pi\pi$ interaction —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roĭzen, and D. S. Chernavskiĭ. **17**(2), 208–15 (Aug. 1973); CPM-7406X0758
—Multiperipheral theory of particle interaction at high energies. πN and NN interactions —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roĭzen, and D. S. Chernavskiĭ. **18**(2), 226–9 (Feb. 1974); CPM-7407X0108
Dunaĭtsev, A. F.—The energy spectrum of γ rays produced in the internal target of the 70-BeV proton synchrotron —A. F. Dunaĭtsev, Yu. I. Ivan'shin, D. B. Kakauridze, I. I. Karpov, A. N. Mestvirishvili, B. A. Morozov, A. I. Saraĭkin, and A. A. Tyapkin. **17**(6), 641–3 (Dec. 1973); CPM-7408X0447
D'yachenko, N. P.—Yields and kinetic energies of fragments from spontaneous and induced fission of Pu^{242} —N. P. D'yachenko, V. N. Kabenin, N. P. Kolosov, B. D. Kuz'minov, and A. I. Sergachev. **17**(4), 362–5 (Oct. 1973); CPM-7407X0142
D'yachenko, P. P.—Fragment characteristics in fission of the compound nucleus U^{236} induced by neutrons and α particles —A. F. Pavlov, V. N. Okolovich, P. P. D'yachenko, and B. D. Kuz'minov. **17**(6), 595–7 (Dec. 1973); CPM-7408X0401
D'yakonov, D. I.—Production of particles with large transverse momenta at high energies —D. I. D'yakonov. **17**(1), 73–7 (Jul. 1973); CPM-7312F0225

—On hadron production in the virtual-photon fragmentation region —A. A. Ansel'm and D. I. D'yakonov. 18(5), 565–9 (May 1974); CPM-7409X0675

Dyatlov, I. T.—"Quarks" in dual models —I. T. Dyatlov. 17(5), 563–5 (Nov. 1973); CPM-7407X1147

Dymova, I. A.—Lateral distribution of the electronic component of extensive air showers —I. A. Dymova and N. N. Kalmykov. 17(1), 54–6 (Jul. 1973); CPM-7312F0206

Dyugaev, A. M.—States of low energy in a two-particle system in a field —A. M. Dyugaev. 17(3), 329–33 (Sep. 1973); CPM-7406X0879

—Energy spectrum of three resonantly interacting particles —A. M. Dyugaev. 18(4), 405–6 (Apr. 1974); CPM-7409X0341

Dzhafarov, I. G.—One-particle exchange models for weak leptonic interactions. leptonic processes —N. A. Guliev and I. G. Dzhafarov. 17(3), 293–7 (Sep. 1973); CPM-7406X0843

Dzhelyadin, R. I.—Study of the backward p⁻-meson production in the reaction $\pi^- p \to pp^-$ in the primary-momentum range 1.80–3.25 GeV/c —V. V. Vladimirskiĭ, R. I. Dzhelyadin, I. A. Dukhovskoi, V. V. Kishkurno, A. P. Krutenkova, V. V. Kulikov, I. A. Radkevich, and V. S. Fedorets. 17(4), 411–2 (Oct. 1973); CPM-7407X0191

Dzhibuti, R. I.—Transformation coefficients in the hyperspherical approach to the nonequal mass four-body problem —R. I. Dzhibuti, V. Yu. Tomchinskiĭ, and N. I. Shubitidze. 18(6), 597–600 (Jun. 1974); CPM-7409X0431

E

Ech, F. A.—Elastic $\pi^- p$, $K^- p$, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. 18(2), 182–6 (Feb. 1974); CPM-7407X0064

Efimov, G. V.—Some physical consequences of a nonlocal quantum theory of weak interaction —V. A. Alebastrov, G. V. Efimov, and Sh. Z. Sel'tser. 18(1), 109–13 (Jan. 1974); CPM-7405F0323

Efimov, V. N.—Interaction of polarized resonant neutrons with oriented nuclei —V. P. Alfimenkov, V. N. Efimov, Ts. Ts. Panteleev, and Yu. I. Fenin. 17(2), 149–52 (Aug. 1973); CPM-7406X0699

—Quartet s phase shift for nd scattering below the threshold in the linear approximation in the interaction range —V. N. Efimov and E. G. Tkachenko. 18(1), 33–4 (Jan. 1974); CPM-7405F0247

—Approximate methods for the solution of the three-nucleon problem at positive energies —V. B. Belyaev, V. N. Efimov, E. G. Tkachenko[U], and H. Schulz. 18(4), 401–4 (Apr. 1974); CPM-7409X0337

Éfros, V. D.—Orthogonal transformations of multidimensional angular harmonics —Ya. A. Smorodinskiĭ and V. D. Éfros. 17(1), 107–13 (Jul. 1973); CPM-7312F0259

—Comments on the K-harmonics method in the three body nuclear problem —V. D. Éfros. 17(5), 517–22 (Nov. 1973); CPM-7407X1101

—Sum rules in scattering of electrons by nuclei —V. D. Éfros. 18(6), 607–15 (Jun. 1974); CPM-7409X0441

Éismont, V. P.—The spectra of the fission x-rays at different kinetic energies of the light fragment and the "fine" structure of the mass yield —A. G. Donichkin, S. M. Solov'ev, and V. P. Éismont. 17(5), 489–92 (Nov. 1973); CPM-7407X1073

—Time of x-ray emission by fragments fission with definite charged —A. G. Donichkin, S. M. Solov'ev, and V. P. Éismont. 18(2), 138–41 (Feb. 1974); CPM-7407X0020

Ekhichev, O. I.—Radiative capture of protons by Zn^{64}, Zn^{66}, and Zn^{68} nuclei —B. A. Nemashkalo, V. E. Storizhko, V. F. Boldyshev, O. I. Ekhichev, A. P. Klyucharev, and A. I. Popov. 17(2), 117–9 (Aug. 1973); CPM-7406X0667

Elagin, Yu. P.—Concerning the magic numbers of neutron-excess nuclei —B. N. Vinogradov and Yu. P. Elagin. 17(2), 128–31 (Aug. 1973); CPM-7406X0678

El-Batununi, F.—Relation between the K-harmonic method and the method of generator coordinates —I. T. Obukhovskiĭ, Yu. F. Smirnov, V. N. Tolstoĭ, K. V. Shitikova, and F. El-Batununi. 17 (4), 386–90 (Oct. 1973); CPM-7407X0166

Eliseev, S. M.—Generation of charged particles by π mesons on light nuclei at high energy —V. G. Grishin, S. M. Eliseev, Sh. V. Inogamov, and J. M. Kohli. 17(5), 531–4 (Nov. 1973); CPM-7407X1115

—Analysis of inelastic collisions of superhigh-energy particles with nuclei —V. S. Barashenkov and S. M. Eliseev. 18(1), 102–4 (Jan. 1974); CPM-7405F0316

Elkamhavi, A. A.—$\alpha\gamma$ angular correlations in inelastic scattering of α particles —T. A. Dmitrieva, N. S. Zelenskaya, A. A. Elkamhavi, and I. B. Teplov. 18(6), 626–30 (Jun. 1974); CPM-7409X0460

El-Kamhavy, A. A.—Angular correlations of the final particles with the γ quanta in direct nuclear reactions in the forward hemisphere of the angular distributions —N. S. Zelenskaya, A. A. El-Kamhavy, and D. A. Shalabaev. 17(1), 27–31 (Jul. 1973); CPM-7312F0179

Éramzhyan, R. A.—Neutron polarization in nuclear μ^- capture —Yu. A. Salganik and R. A. Éramzhyan. 17(2), 137–8 (Aug. 1973); CPM-7406X0687

Ermakov, K. N.—Effect of nucleon correlations in the reaction $C^{12}(p,2p)B^{11}$ within the framework of the Glauber theory —K. N. Ermakov, M. B. Zhalov, and V. E. Starodubskiĭ. 18(4), 412–5 (Apr. 1974); CPM-7409X0348

Erofeev, I. A.—The charge-exchange reaction $K^- p \to \bar{K}^0 n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Evseev, V. S.—Determination of the probability of the (μ^-, ν2n) reaction resulting from μ^- capture in sulfur and calcium —V. S. Evseev and V. S. Roganov. 17(5), 528–30 (Nov. 1973); CPM-7407X1112

—Spectra of the neutrons from the absorption of negative muons by heavy nuclei, and the resonance model of nuclear reactions —V. S. Evseev and T. N. Mamedov. 18(5), 499–502 (May 1974); CPM-7409X0609

F

Fadin, V. S.—Angular distribution of photon brehmsstrahlung in collision of ultrarelativistic electrons —V. S. Fadin and V. A. Khoze. 18(3), 289–94 (Mar. 1974); CPM-7409X0047

Faruk, M. A.—Investigation of the reaction $Si^{28}(He^3, p)P^{30}$ —Yu. V. Nikitenko, G. M. Osetinskiĭ, Song Wong Nam, and M. A. Faruk. 18(5), 492–5 (May 1974); CPM-7409X0602

Fedorets, V. S.—Study of the backward p⁻-meson production in the reaction $\pi^- p \to pp^-$ in the primary-momentum range 1.80–3.25 GeV/c —V. V. Vladimirskiĭ, R. I. Dzhelyadin, I. A. Dukhovskoi, V. V. Kishkurno, A. P. Krutenkova, V. V. Kulikov, I. A. Radkevich, and V. S. Fedorets. 17(4), 411–2 (Oct. 1973); CPM-7407X0191

Fedorov, A. D.—Allowance for anharmonic terms in the kinetic energy of complex and simple collective models —A. D. Fedorov. 18(5), 521–3 (May 1974); CPM-7409X0631

Fedorov, F. I.—The vector parameter and the calculation of the matrix elements in electrodynamics —F. I. Fedorov. 17(4), 461–4 (Oct. 1973); CPM-7407X0241

Fedorov, V. B.—Experimental study of the mechanism of the reaction $Li^6(\pi^-, \pi^- p)He^5$ —Yu. D. Bayukov, L. S. Vorob'ev, V. M. Kolybasov, G. A. Leksin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 17(5), 479–83 (Nov. 1973); CPM-7407X1063

—Scaling invariance effects in proton-nucleus backward scattering in the few-GeV energy range—Yu. D. Bayukov, L. S. Vorob'ev, G. A. Lesin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 18(6), 639–40 (Jun. 1974)

Fedorov, V. M.—Intensity of cosmic muons at large rock and water depths in ground and their energy spectrum at sea level —Yu. N. Vavilov, Yu. A. Trubkin, and V. M. Fedorov. 18(4), 434–9 (Apr. 1974); CPM-7409X0370

Fedunov, A. G.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^- p \to e^+ e^- n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 17(1), 44–8 (Jul. 1973); CPM-7312F0196

—Measurement of the pion and nucleon form factors at the Timelike four-momentum Transfers $k^2 = 1.7$, 2.2, and 2.9 F^{-3} —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 18(1), 53–6 (Jan. 1974); CPM-7405F0267

Fenin, Yu. I.—Interaction of polarized resonant neutrons with oriented nuclei —V. P. Alfimenkov, V. N. Efimov, Ts. Ts. Panteleev, and Yu. I. Fenin. 17(2), 149–52 (Aug. 1973); CPM-7406X0699

Fetisov, N. I.—Direct processes in the inelastic scattering of 14.4–MeV neutrons by Nb and Co nuclei —O. A. Sal'nikov, E. M. Saprykin, G. V. Kotel'nikova, G. N. Lovchikova, A. A. Luk'yanov, and N. I. Fetisov. 17(5), 523–5 (Nov. 1973); CPM-7407X1107

Filimonov, V. A.—Dependence of Λ–nuclear potential on the momentum and binding energy of hypernuclei —V. A. Filimonov. 18(6), 601–6 (Jun. 1974); CPM-7409X0435

Filippov, A. T.—Possible spin effects in pp scattering at high energies and the X^0(960) meson —A. Buyak, A. N. Zaslavskiĭ[1], V. I. Ogievetskiĭ, and A. T. Filippov. 18(4), 462–4 (Apr. 1974); CPM-7409X0398

Flambaum, V. V.—Single muon production in colliding electron–positron beams —O. P. Sushkov and V. V. Flambaum. 18 (1), 82–3 (Jan. 1974); CPM-7405F0296

Folomeshkin, V. N.—Possibilities of studying inelastic $\bar{\nu}_e e$ scattering reactions with high energy neutrino beams —V. N. Folomeshkin and M. Yu. Khlopov. 17(4), 423–4 (Oct. 1973); CPM-7407X0203

Fomushkin, E. F.—Measurement of the effective cross section for the fission of the $Cm^{244-248}$ isotopes by neutrons from a fast reactor — E. F. Fomushkin, E. K. Gutnikova, B. K. Maslennikov, and A. M. Korochkin. 17(1), 12–4 (Jul. 1973); CPM-7312F0164

Fradkin, E. S.—"Extra" Goldstones in gauge theory with spontaneous breaking —I. V. Tyutin and E. S. Fradkin. 18(1), 114–8 (Jan. 1974); CPM-7405F0328

Frank, I. M.—Interaction of neutrons of energy 13–17 MeV with lead isotopes —B. A. Benetskiĭ, B. B. Nefedov, I. M. Frank, and I. V. Shtranikh. 17(1), 10–1 (Jul. 1973); CPM-7312F0162

—Transition radiation at the angle of total internal reflection of light from the medium —A. P. Kobzev, S. Mihaliak, E. Rutkovsky, and I. M. Frank. 18(4), 446–8 (Apr. 1974); CPM-7409X0382

Franke, V. A.—Construction of factorizable dual amplitudes on the basis of classical group representations by functions of several complex variables —S. N. Manida and V. A. Franke. 18(3), 321–3 (Mar. 1974); CPM-7409X0079

Frolov, G. V.—Amplitude of the Compton scattering by electrons with allowance for radiative corrections —G. V. Frolov. 17(2), 180–2 (Aug. 1973); CPM-7406X0730

Fursa, A. D.—Elastic and inelastic scattering of fast nucleons and the cluster structure of Li^6 —I. S. Dotsenko and A. D. Fursa. 17(4), 402–7 (Oct. 1973); CPM-7407X0182

—Diffraction scattering of protons by the deformed nucleus C^{12} —I. S. Dotsenko and A. D. Fursa. 17(4), 408–10 (Oct. 1973); CPM-7407X0188

Fuya, Kh.—Probabilities of electromagnetic transitions in La^{132} and La^{133} nuclei —V. A. Morozov, T. M. Muminov, Kh. Fuya, and A. B. Khalikulov. 17(4), 348–51 (Oct. 1973); CPM-7407X0128

G

Galstyan, Dzh. A.—Determination of the cross section of photodisintegration of emulsion nuclei by 1.0–4.5 GeV γ–quanta —Dzh. A. Galstyan, A. M. Zverev, V. V. Mameev, and M. A. Martirosyan. 17(5), 474–5 (Nov. 1973); CPM-7407X1058

Gal'tsov, D. V.—Spectrum and polarization of synchrotron radiation in the case of strong radiation friction —D. V. Gal'tsov and V. A. Losev. 17(1), 57–8 (Jul. 1973); CPM-7312F0209

Gangrskiĭ, Yu. P.—Search for α emission in the decay of spontaneously fissionable isomers —A. G. Belov, Yu. P. Gangrskiĭ, B. Dalkhsuren, A. M. Kucher, and Nguen Kong Khan. 17(5), 493–5 (Nov. 1973); CPM-7407X1077

Ganzorig, Z.—π^+–meson double charge exchange on Bi^{209} nuclei — Yu. A. Batusov, Z. Ganzorig, I. V. Dudova, B. P. Osipenko, V. M. Sidorov, V. A. Khalkin, and D. Chultém. 18(3), 250–2 (Mar. 1974); CPM-7409X0008

Gareev, F. A.—One–nucleon transfer reactions to quasi–intersecting levels 1/2+ [660] and 1/2+[400], 3/2+[651] and 3/2+[402] —F. A. Gareev, M. Baznat, H. J. Wiebicke, and H. Schulz. 17(4), 397–401 (Oct. 1973); CPM-7407X0177

Gavrilov, K. A.—Production of nuclei in the reactions with Kr and Xe ions —Yu. Ts. Oganesyan, Yu. E. Penionzhkevich, Nguyen Tac Anh, D. M. Nadkarnee, K. A. Gavrilov, Kim De En, and M. Yussonua. 18(4), 377–80 (Apr. 1974); CPM-7409X0313

Gelberg, A.—Angular γγ–correlations in In^{115} —T. Badica, A. Gelberg, S. Dima, I. Popescu, and C. Chortea. 17(4), 345–7 (Oct. 1973); CPM-7407X0125

Genchev, V. I.—Absorption of stopped π^- mesons by nitrogen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 131–4 (Feb. 1974); CPM-7407X0013

—Absorption of stopped π^- mesons by oxygen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 135–7 (Feb. 1974); CPM-7407X0017

Gerasimov, S. B.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskiĭ, and M. I. Yatsuta. 18(1), 41–4 (Jan. 1974); CPM-7405F0255

Geshkenbein, B. V.—Consequences from microcausality for the electroproduction process —B. V. Geshkenbein and A. I. Komech. 18(4), 473–7 (Apr. 1974); CPM-7409X0409

Gevorkyan, S. R.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. 18(4), 420–3 (Apr. 1974); CPM-7409X0356

Ginzburg, I. F.—Backward πN scattering and the possible existence of an elementary nucleon —I. F. Ginzburg and L. I. Perlovskiĭ. 17 (6), 675–6 (Dec. 1973); CPM-7408X0481

—Role of nucleons in high–energy collisions —I. F. Ginzburg. 18(2), 217–9 (Feb. 1974); CPM-7407X0099

Gladkov, V. V.—Fission of Np^{239} in the reaction Np^{237}(t, pf) —M. F. Andreev, V. V. Gladkov, V. A. Zavgorodniĭ, V. I. Serov, and V. M. Surin. 17(3), 243–5 (Sep. 1973); CPM-7406X0793

Gol'dberg, V. Z.—An investigation of three–particle decays of Li^6 — K. P. Artemov, V. Z. Gol'dberg, I. P. Petrov, V. P. Rudakov, I. N. Serikov, and V. A. Timofeev. 17(2), 115–6 (Aug. 1973); CPM-7406X0665

Gol'dshtein, V. A.—Inelastic electromagnetic form factors of K^{39} and Ca^{40} —V. G. Vlasenko, N. G. Afanas'ev, V. A. Gol'dshtein , S. V. Dementiĭ, E. L. Kuplennikov, V. I. Ogurtsov, and V. I. Startsev. 17(6), 585 (Dec. 1973); CPM-7408X0391

—Study of quasielastic high energy electron scattering on light nuclei —E. L. Kuplennikov, N. G. Afanas'ev, V. A. Gol'dshtein, V. I. Ogurtsov, and V. G. Vlasenko. 18(1), 10–1 (Jan. 1974); CPM-7405F0224

Golovanova, N. F.—Absorption of stopped π^- mesons by nitrogen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18 (2), 131–4 (Feb. 1974); CPM-7407X0013

—Absorption of stopped π^- mesons by oxygen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 135–7 (Feb. 1974); CPM-7407X0017

Golovin, B. M.—Energy spectra and polarization of protons from the reaction pd → ppn at 600 MeV —B. M. Golovin, G. I. Lykasov, A. M. Rozanova, and F. Sh. Khamraev. 18(2), 171–2 (Feb. 1974); CPM-7407X0053

Golubkov, Yu. A.—Quark parton model and a possibility of detecting the W boson in high–energy nucleon–nucleon collisions —Yu. A. Golubkov, A. A. Ivanilov, Yu. P. Nikitin, and G. V. Rozhnov. 18 (2), 203–7 (Feb. 1974); CPM-7407X0085

Goncharov, N. V.—Dependence of the yield of pions and protons emitted at $\theta_{lab} = 90°$ at $E_\gamma^{max} = 400$ MeV on the mass number of the nucleus —N. V. Goncharov, A. I. Derebchinskiĭ, O. G. Konovalov, S. G. Tonapetyan, and V. M. Khovorostyan. 17(2), 124–7 (Aug. 1973); CPM-7406X0674

—Calculation of the cross sections for pion photoproduction from atomic nuclei —A. V. Shebeko and N. V. Goncharov. 18(5), 532–7 (May 1974); CPM-7409X0642

Gorbatov, A. M.—Introduction of proton, neutron, and hyperon collective degrees of freedom into the computation scheme of the K–harmonics method —A. M. Gorbatov. 17(3), 277–80 (Sep. 1973); CPM-7406X0827

—The role of the core in formation of real nuclei —A. M. Gorbatov. 17(6), 614–9 (Dec. 1973); CPM-7408X0420

—Estimate of the method of multidimensional harmonics with the aid of Green's functions —A. M. Gorbatov. 18(5), 524–8 (May 1974); CPM-7409X0634

Gorbenko, V. G.—Determination of the degree of polarization of coherent bremsstrahlung from a diamond single crystal —V. G. Gorbenko, L. M. Derkach, Yu. V. Zhebrovskiĭ, L. Ya. Kolesnikov, and A. L. Rubashkin. 17(4), 413–6 (Oct. 1973); CPM-7407X0193

Gorenshtein, M. I.—Statistical and dynamical properties of dual resonances —M. I. Gorenshtein, G. M. Zinov'ev, V. A. Miranskiĭ, B. V. Struminskiĭ, and V. P. Shelest. 18(5), 577–82 (May 1974); CPM-7409X0687

Gorin, Yu. P.—Differences between the total cross sections at momenta up to 65 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. 17(2), 157–65 (Aug. 1973); CPM-7406X0707

—Nuclear absorption cross sections for pions, kaons, protons, and antiprotons in the momentum range 6–60 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, R. N. Krasnokutskiĭ, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. 18(2), 173–8 (Feb. 1974); CPM-7407X0055

—The charge-exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Gornov, M. G.—Coherent generation of the system $2\pi^-\pi^+$ on nuclei —A. D. Vasil'kova, M. G. Gornov, V. G. Kirillov-Ugryumov, V. P. Protasov, and F. M. Sergeev. 17(2), 166–70 (Aug. 1973); CPM-7406X0716

—Analysis of the reaction $\pi^-N(A) \to 2\pi^-\pi^+N(A)$ in momentum space —A. D. Vasil'kova, M. G. Gornov, V. I. Levina, V. P. Protasov, and F. M. Sergeev. 18(2), 190–2 (Feb. 1974); CPM-7407X0072

Gorshkov, B. L.—An investigation of the fission of U^{238} and Bi^{209} by 1-GeV protons —A. A. Kotov, G. G. Semenchuk, B. A. Bochagov, B. L. Gorshkov, G. G. Kovshevnyĭ, V. R. Reznik, and G. E. Solyakin. 17(5), 498–501 (Nov. 1973); CPM-7407X1082

Gorshkov, G. V.—Production of neutrons in Pb, Cd, Fe, and Al by high energy muons —G. V. Gorshkov, V. A. Zyabkin, and R. M. Yakovlev. 18(1), 57–61 (Jan. 1974); CPM-7405F0271

Goryachev, A. M.—Giant dipole resonance in nuclei of the transitional region around $A \sim 190$ —A. M. Goryachev, G. N. Zalesnyĭ, S. F. Semenko, and B. A. Tulupov. 17(3), 236–9 (Sep. 1973); CPM-7406X0786

Goryachev, Yu. M.—Excitation of O^{16} levels by high-energy protons —Yu. M. Goryachev, V. P. Kanavets, I. V. Kirpichnikov, I. I. Levintov, B. V. Morozov, N. A. Nikiforov, and A. S. Starostin. 17(5), 476–8 (Nov. 1973); CPM-7407X1060

Grach, I. L.—Integral equations for four nucleons with account of spin and isospin —I. M. Narodetskiĭ and I. L. Grach. 18(3), 342–9 (Mar. 1974); CPM-7409X0100

Graevskiĭ, A. P.—Angular distribution of neutrons from the ternary fissions of Cf^{252} nuclei —A. P. Graevskiĭ, B. A. Bochagov, and Yu. A. Chestov. 17(4), 366–7 (Oct. 1973); CPM-7407X0146

—Angular and kinematical correlations of α particles and neutrons from triple fission of Cf^{252} nuclei —A. P. Graevskiĭ and G. E. Solyakin. 18(4), 369–70 (Apr. 1974); CPM-7409X0305

Granovskiĭ, Ya. I.—Retardation in elastic photon scattering by hydrogen atoms —Ya. I. Granovskiĭ and V. I. Nechet. 18(2), 197 (Feb. 1974); CPM-7407X0079

Gribov, V. N.—Properties of the Pomeranchuk pole, diffraction scattering, and the asymptotic equality of the total cross sections —V. N. Gribov. 17(3), 313–8 (Sep. 1973); CPM-7406X0863

—Character of inclusive spectra and fluctuations produced in inelastic processes by multipomeron exchange —V. A. Abramovskiĭ, V. N. Gribov, and O. V. Kancheli. 18(3), 308–17 (Mar. 1974); CPM-7409X0066

Gridnev, G. F.—Direct reactions in the interaction of Ne^{22} with Th^{232} —A. G. Artyukh, J. Wilczynski, V. V. Volkov, G. F. Gridnev, and V. L. Mikheev. 17(6), 586–9 (Dec. 1973); CPM-7408X0392

Grigor'ev, V. K.—The charge-exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Grigoriev, E. P.—EO transition in Pd^{106} —E. P. Grigoriev, A. V. Zolotavin, and V. O. Sergeev. 17(6), 583–4 (Dec. 1973); CPM-7408X0389

Grin', Yu. T.—Deformation parameters for light nuclei —Yu. T. Grin' and A. B. Kochetov. 18(2), 145–6 (Feb. 1974); CPM-7407X0027

Grishin, A. P.—The charge-exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Grishin, V. G.—Mean multiplicities of secondaries in hadron–hadron collisions —V. G. Grishin. 17(1), 70–2 (Jul. 1973); CPM-7312F0222

—Generation of charged particles by π mesons on light nuclei at high energy —V. G. Grishin, S. M. Eliseev, Sh. V. Inogamov, and J. M. Kohli. 17(5), 531–4 (Nov. 1973); CPM-7407X1115

—Multiple production of charged particles in π^-p and π^-n interactions at 40 GeV/c —V. G. Grishin, S. P. Kuleshov, V. A. Matveev, A. N. Sisakyan, and G. Yancso. 17(6), 667–8 (Dec. 1973); CPM-7408X0473

Gudima, K. K.—Elastic interactions of high-energy helium ions with atomic nuclei —V. S. Barashenkov, K. K. Gudima, F. G. Zheregi, A. S. Il'inov, and V. D. Toneev. 17(2), 221–4 (Aug. 1973); CPM-7406X0771

Guiordenescu, H.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskiĭ, and M. I. Yatsuta. 18(1), 41–4 (Jan. 1974); CPM-7405F0255

Guliev, N. A.—One-particle exchange models for weak leptonic interactions. leptonic processes —N. A. Guliev and I. G. Dzhafarov. 17(3), 293–7 (Sep. 1973); CPM-7406X0843

Gulkanyan, G. R.—Determination of the $\pi\pi$ scattering length a_0 from the analysis of experimental data on τ decay —S. A. Bunyatov, G. R. Gulkanyan, and V. S. Kurbatov. 17(6), 681–2 (Dec. 1973); CPM-7408X0487

—Inelastic π^+p interactions at energy 230 MeV —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, and V. M. Sidorov. 18(1), 45–8 (Jan. 1974); CPM-7405F0259

—Absorption of stopped π^- mesons by nitrogen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 131–4 (Feb. 1974); CPM-7407X0013

—Absorption of stopped π^- mesons by oxygen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 135–7 (Feb. 1974); CPM-7407X0017

—The reaction $\pi^-p \to \pi^+\pi^-n$ near threshold —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, V. S. Kurbatov, V. M. Sidorov, and V. A. Yarba. 18(4), 426–9 (Apr. 1974); CPM-7409X0362

—Emission of charged particles in capture of negative muons by emulsion nuclei —Yu. A. Batusov, S. A. Bunyatov, L. Vizireva, G. R. Gulkanyan, F. Mirsalikhova, and V. M. Sidorov. 18(5), 496–8 (May 1974); CPM-7409X0606

Gul'karov, I. S.—Excitation of giant quadrupole resonance in Ni^{60} by electron scattering —I. S. Gul'karov. 18(3), 267–9 (Mar. 1974); CPM-7409X0025

Gul'ko, A. D.—T-invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. 18(1), 6–9 (Jan. 1974); CPM-7405F0220

Gurentsov, V. I.—Cross sections of the deep inelastic processes $\nu+p\to l^-+l^++l^-+$ hadrons —E. V. Bugaev, V. I. Gurentsov, G. V. Domogatskiĭ, and I. M. Zheleznykh. **17**(5), 558–60 (Nov. 1973); CPM-7407X1142

Gutnikova, E. K.—Measurement of the effective cross section for the fission of the $Cm^{244-248}$ isotopes by neutrons from a fast reactor —E. F. Fomushkin, E. K. Gutnikova, B. K. Maslennikov, and A. M. Korochkin. **17**(1), 12–4 (Jul. 1973); CPM-7312F0164

H

Hien, Pham Zui—Angular distribution of fragments of spontaneously fissioning isomers —Pham Zui Hien. **17**(3), 251–4 (Sep. 1973); CPM-7406X0801

Hladky, J.—Search for a new vector meson in K_L^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. **18**(4), 424–5 (Apr. 1974); CPM-7409X0360

I

Ignatyuk, A. V.—Spin dependence of the density of excited states in the superfluid nucleus model —A. V. Ignatyuk. **17**(3), 258–65 (Sep. 1973); CPM-7406X0808

—Density of excited particle–hole states in the superfluid nuclear model —A. V. Ignatyuk and Yu. V. Sokolov. **17**(4), 376–80 (Oct. 1973); CPM-7407X0156

—Level density of light even–even nuclei in a wide range of excitation energies —A. V. Ignatyuk, Yu. V. Sokolov, and Yu. N. Shubin. **18**(5), 510–4 (May 1974); CPM-7409X0620

Il'in, Yu. M.—Scalar and pseudoscalar mesons in broken nonlinear chiral SU(3) ⊗SU(3) dynamics —Yu. M. Il'in and V. Ya. Sabo. **18**(2), 238–40 (Feb. 1974); CPM-7407X0120

Il'ina, N. P.—Muon component of an extensive air shower near the shower axis —N. P. Il'ina, N. N. Kalmykov, J. Oleinichak, B. A. Khrenov, G. B. Khristiansen, and Z. V. Yarochkina. **18**(1), 62–9 (Jan. 1974); CPM-7405F0276

—Muons in extensive air showers (interaction with matter) —N. P. Il'ina, B. A. Khrenov, and Z. V. Yarochkina. **18**(4), 440–5 (Apr. 1974); CPM-7409X0376

Il'inov, A. S.—Elastic interactions of high-energy helium ions with atomic nuclei —V. S. Barashenkov, K. K. Gudima, F. G. Zheregi, A. S. Il'inov, and V. D. Toneev. **17**(2), 221–4 (Aug. 1973); CPM-7406X0771

—Energy dependence of the ratio Γ_n/Γ_f for transuranium elements —V. S. Barashenkov, F. G. Zhereghi, A. S. Il'inov, and V. D. Toneev. **18**(1), 20 (Jan. 1974); CPM-7405F0234

Inogamov, Sh. V.—Generation of charged particles by π mesons on light nuclei at high energy —V. G. Grishin, S. M. Eliseev, Sh. V. Inogamov, and J. M. Kohli. **17**(5), 531–4 (Nov. 1973); CPM-7407X1115

Inopin, E. V.—Effect of exchange forces on the sum rule for electron scattering by nuclei —E. V. Inopin and S. N. Roshchupkin. **17**(5), 526–7 (Nov. 1973); CPM-7407X1110

Iroshnikov, G. S.—$3\pi\gamma$ interaction in the inelastic scattering of pions by heavy nuclei —G. S. Iroshnikov and L. P. Kotova. **17**(5), 545–8 (Nov. 1973); CPM-7407X1129

Isaev, P. S.—An analysis of the $K\pi$ interaction up to 1 GeV —P. S. Isaev and V. I. Khleskov. **17**(1), 84–7 (Jul. 1973); CPM-7312F0236

—An investigation of the reactions $\gamma\gamma\to K\bar{K}$ and $\gamma\gamma\to\gamma\gamma$ by means of the dispersion relations —P. S. Isaev and V. I. Khleskov. **17**(2), 188–90 (Aug. 1973); CPM-7406X0738

Isakov, V. V.—Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. **18**(5), 538–45 (May 1974); CPM-7409X0648

—An investigation of $K^-p\to\bar{K}^0n$ charge exchange at 25 and 35 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, V. E. Postoev, Yu. D. Prokoshkin, and V. K. Semenov. **18**(5), 546–50 (May 1974); CPM-7409X0656

—The reaction $\pi^-p\to\eta^0n$ in the momentum region up to 50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, Yu. D. Prokoshkin, E. A. Razuvaev, and V. K. Semenov. **18**(6), 648–51 (Jun. 1974); CPM-7409X0482

Israelyan, M. Kh.—Photoproduction of single η mesons on nuclei at $E_\gamma=2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. **18**(4), 420–3 (Apr. 1974); CPM-7409X0356

Ivanenko, I. P.—Experimental data on extensive air showers at heights 5000–12000 m —R. A. Antonov, I. P. Ivanenko, and Z. I. Tulinova. **18**(3), 285–8 (Mar. 1974); CPM-7409X0043

Ivanilov, A. A.—Quark parton model and a possibility of detecting the W boson in high-energy nucleon–nucleon collisions —Yu. A. Golubkov, A. A. Ivanilov, Yu. P. Nikitin, and G. V. Rozhnov. **18**(2), 203–7 (Feb. 1974); CPM-7407X0085

Ivanov, A. N.—Cancellation of divergences and gauge invariance in the massive Yang–Mills field theory —A. N. Ivanov and V. M. Shekhter. **18**(3), 324–32 (Mar. 1974); CPM-7409X0082

—The ambiguity in the anomalous magnetic moment of the muon in gauge-invariant theories —A. N. Ivanov. **18**(6), 658–63 (Jun. 1974); CPM-7409X0492

Ivanov, E. A.—Electromagnetic interaction in SU(3) ×SU(3) symmetry and pseudoscalar meson decays —B. M. Zupnik and E. A. Ivanov. **17**(3), 301–6 (Sep. 1973); CPM-7406X0851

Ivanova, L. K.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskii, and M. I. Yatsuta. **18**(1), 41–4 (Jan. 1974); CPM-7405P0255

Ivan'shin, Yu. I.—The energy spectrum of γ rays produced in the internal target of the 70-BeV proton synchrotron —A. F. Dunaitsev, Yu. I. Ivan'shin, D. B. Kakauridze, I. I. Karpov, A. N. Mestvirishvili, B. A. Morozov, A. I. Saraikin, and A. A. Tyapkin. **17**(6), 641–3 (Dec. 1973); CPM-7408X0447

Ivanyuk, F. A.—Influence of nuclear shell structure on the polarization of elastically scattered neutrons —F. A. Ivanyuk and B. D. Konstantinov. **18**(6), 616–8 (Jun. 1974); CPM-7409X0450

J

Jankauskas, K. I.—Calculation of the properties of low-lying levels taking multiquantum excitations into account —A. K. Petrauskas, G. P. Kamuntavičius, and K. I. Jankauskas. **17**(3), 266–8 (Sep. 1973); CPM-7406X0816

Jenkovszky, L. L.—Large-angle scattering in the "DAMA" model —A. I. Bugrii, L. L. Jenkovszky, and N. A. Kobylinskii. **17**(3), 319–21 (Sep. 1973); CPM-7406X0869

—DAMA single-particle distributions —L. L. Jenkovszky, N. A. Kobylinskii, and E. S. Martynov. **18**(5), 573–6 (May 1974); CPM-7409X0683

K

Kabenin, V. N.—Yields and kinetic energies of fragments from spontaneous and induced fission of Pu^{242} —N. P. D'yachenko, V. N. Kabenin, N. P. Kolosov, B. D. Kuz'minov, and A. I. Sergachev. **17**(4), 362–5 (Oct. 1973); CPM-7407X0142

Kachanov, V. A.—Measurement of the $K^-p\to\bar{K}^0n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. **17**(6), 638–40 (Dec. 1973); CPM-7408X0444

—Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. **18**(5), 538–45 (May 1974); CPM-7409X0648

—An investigation of $K^-p\to\bar{K}^0n$ charge exchange at 25 and 35 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, V. E. Postoev, Yu. D. Prokoshkin, and V. K. Semenov. **18**(5), 546–50 (May 1974); CPM-7409X0656

—The reaction $\pi^-p\to\eta^0n$ in the momentum region up to 50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, Yu. D. Prokoshkin, E. A. Razuvaev, and V. K. Semenov. **18**(6), 648–51 (Jun. 1974); CPM-7409X0482

Kadmenskiĭ, S. G.—Probabilities of α decay of odd and odd–odd spherical nuclei and superfluidity —A. A. Martynov and S. G. Kadmenskiĭ. **17**(1), 39–41 (Jul. 1973); CPM-7312F0191

—Decay widths of single-nucleon quasistationary states of deformed nuclei —S. G. Kadmenskiĭ and V. G. Khlebostroev. 18(5), 505–9 (May 1974); CPM-7409X0615

Kaganovich, A. B.—Divergences in isotopic mass differences of hadrons and spontaneous breaking of isospin symmetry —A. B. Kaganovich. 18(2), 241 (Feb. 1974); CPM-7407X0123

Kaĭdalov, A. B.—Regge parametrization of the $\pi\pi$ scattering amplitudes. description of the reaction $\pi^- p \to \pi^- \pi^+ n$ by the OPER model —K. G. Boreskov, A. B. Kaĭdalov, and L. A. Ponomarev. 17(6), 669–74 (Dec. 1973); CPM-7408X0475

Kakauridze, D. B.—The energy spectrum of γ rays produced in the internal target of the 70-BeV proton synchrotron —A. F. Dunaĭtsev, Yu. I. Ivan'shin, D. B. Kakauridze, I. I. Karpov, A. N. Mestvirishvili, B. A. Morozov, A. I. Saraĭkin, and A. A. Tyapkin. 17(6), 641–3 (Dec. 1973); CPM-7408X0447

—Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. 18(5), 538–45 (May 1974); CPM-7409X0648

—An investigation of $K^- p \to \bar{K}^0 n$ charge exchange at 25 and 35 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, V. E. Postoev, Yu. D. Prokoshkin, and V. K. Semenov. 18(5), 546–50 (May 1974); CPM-7409X0656

—The reaction $\pi^- p \to \eta^0 n$ in the momentum region up to 50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, Yu. D. Prokoshkin, E. A. Razuvaev, and V. K. Semenov. 18(6), 648–51 (Jun. 1974); CPM-7409X0482

Kalinauskas, R. K.—Microscopic analog of the collective Bohr–Mottelson model —V. V. Vanagas and R. K. Kalinauskas. 18(4), 395–400 (Apr. 1974); CPM-7409X0331

Kallosh, R. E.—The equivalence theorem and gauge invariance in renormalizable theories —R. E. Kallosh and I. V. Tyutin. 17(1), 98–106 (Jul. 1973); CPM-7312F0250

Kalmykov, N. N.—Lateral distribution of the electronic component of extensive air showers —I. A. Dymova and N. N. Kalmykov. 17(1), 54–6 (Jul. 1973); CPM-7312F0206

—Muon component of an extensive air shower near the shower axis —N. P. Il'ina, N. N. Kalmykov, J. Oleinichak, B. A. Khrenov, G. B. Khristiansen, and Z. V. Yarochkina. 18(1), 62–9 (Jan. 1974); CPM-7405F0276

—Possible existence of an anomalous interaction of muons at energies above 10 TeV —N. N. Kalmykov and G. B. Khristiansen. 18(5), 551–3 (May 1974); CPM-7409X0661

Kamerdzhiev, S. P.—Equations for one- and two-particle density matrices in the Green's function method. Comparison with the random-phase approximation —S. P. Kamerdzhiev. 18(4), 386–90 (Apr. 1974); CPM-7409X0322

Kamuntavičius, G. P.—Calculation of the properties of low-lying levels taking multiquantum excitations into account —A. K. Petrauskas, G. P. Kamuntavičius, and K. I. Jankauskas. 17(3), 266–8 (Sep. 1973); CPM-7406X0816

Kanavets, V. P.—Excitation of O^{16} levels by high-energy protons —Yu. M. Goryachev, V. P. Kanavets, I. V. Kirpichnikov, I. I. Levintov, B. V. Morozov, N. A. Nikiforov, and A. S. Starostin. 17(5), 476–8 (Nov. 1973); CPM-7407X1060

Kancheli, O. V.—Character of inclusive spectra and fluctuations produced in inelastic processes by multipomeron exchange —V. A. Abramovskiĭ, V. N. Gribov, and O. V. Kancheli. 18(3), 308–17 (Mar. 1974); CPM-7409X0066

Kapustnikov, A. A.—Slopes of π-meson spectra in k→3 π decays —A. A. Kapustnikov. 18(6), 664–6 (Jun. 1974); CPM-7409X0498

Karmanov, V. A.—Pion–deuteron scattering at energies near the Δ resonance and isobar–nucleon interaction —V. A. Karmanov. 17(6), 626–9 (Dec. 1973); CPM-7408X0432

—The $\Delta N \to NN$ interaction —V. A. Karmanov, L. A. Kondratyuk, G. A. Leksin, and F. M. Khasanov. 18(5), 583–5 (May 1974); CPM-7409X0693

—Pion–deuteron scattering at moderate energies with allowance for the particle spins —V. A. Karmanov. 18(6), 621–5 (Jun. 1974); CPM-7409X0455

Karnaukhov, V. A.—Measurement of coincidences between positrons and delayed protons for Te^{109} —D. D. Bogdanov, V. A. Karnaukhov, and L. A Petrov. 17(3), 233–5 (Sep. 1973); CPM-7406X0783

—Fine structure of delayed proton spectrum —V. A. Karnaukhov, D. D. Bogdanov, and L. A. Petrov. 17(5), 465–8 (Nov. 1973); CPM-7407X1049

—Delayed protons from Te^{109} and the β-decay strength function —D. D. Bogdanov, V. A. Karnaukhov, and L. A. Petrov. 18(1), 1–5 (Jan. 1974); CPM-7405F0215

Karpekov, Yu. D.—Measurement of the $K^- p \to \bar{K}^0 n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. 17(6), 638–40 (Dec. 1973); CPM-7408X0444

Karpikhin, I. L.—T-invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. 18(1), 6–9 (Jan. 1974); CPM-7405F0220

Karpov, I. L.—The energy spectrum of γ rays produced in the internal target of the 70-BeV proton synchrotron —A. F. Dunaĭtsev, Yu. I. Ivan'shin, D. B. Kakauridze, I. I. Karpov, A. N. Mestvirishvili, B. A. Morozov, A. I. Saraĭkin, and A. A. Tyapkin. 17(6), 641–3 (Dec. 1973); CPM-7408X0447

Kartamyshev, A. A.—$\pi^- p$ elastic scattering at $p_{\pi^-} = 4.45$ GeV/c —A. A. Kartamyshev, K. I. Mukhin, A. S. Romantseva, M. M. Sulkovskaya, and A. F. Sustavov. 17(1), 42–3 (Jul. 1973); CPM-7312F0194

Kazaryan, G. Kh.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. 18(4), 420–3 (Apr. 1974); CPM-7409X0356

Kerbikov, B. O.—Bound quasinuclear states of the system $2N2\bar{N}$ —E. S. Birger, B. O. Kerbikov, N. B. Konyukhova, and I. S. Shapiro. 17(1), 92–5 (Jul. 1973); CPM-7312F0244

—Baryon resonances of the quasi-nuclear type —O. D. Dal'karov, B. O. Kerbikov, I. A. Rumyantsev, and I. S. Shapiro. 17(6), 688–92 (Dec. 1973); CPM-7408X0494

Keropyan, M. I.—A possible approximation of the experimental data on the secondary pion energies in nn collisions in c.m.s. —M. I. Keropyan and É. A. Mamidzhanyan. 18(2), 195–6 (Feb. 1974); CPM-7407X0077

Khak, Tang San—Search for a spontaneously fissioning isomer nucleus U^{236m} in the reaction $U^{235}(n, \gamma)$ —Zen Chang Bom, A. Laitay, A. A. Omelyanenko, Ts. Ts. Panteleev, S. M. Polikanov, Yu. V. Ryabov, and Tang San Khak. 18(1), 18–9 (Jan. 1974); CPM-7405F0232

Khalikulov, A. B.—Probabilities of electromagnetic transitions in La^{132} and La^{133} nuclei —V. A. Morozov, T. M. Muminov, Kh. Fuya, and A. B. Khalikulov. 17(4), 348–51 (Oct. 1973); CPM-7407X0128

Khalkin, V. A.—π^+-meson double charge exchange on Bi^{209} nuclei —Yu. A. Batusov, Z. Ganzorig, I. V. Dudova, B. P. Osipenko, V. M. Sidorov, V. A. Khalkin, and D. Chultém. 18(3), 250–2 (Mar. 1974); CPM-7409X0008

Khamraev, F. Sh.—Energy spectra and polarization of protons from the reaction pd → ppn at 600 MeV —B. M. Golovin, G. I. Lykasov, A. M. Rozanova, and F. Sh. Khamraev. 18(2), 171–2 (Feb. 1974); CPM-7407X0053

Khan, Nguen Kong—Search for α emission in the decay of spontaneously fissionable isomers —A. G. Belov, Yu. P. Gangrskiĭ, B. Dalkhsuren, A. M. Kucher, and Nguen Kong Khan. 17(5), 493–5 (Nov. 1973); CPM-7407X1077

Kharchenko, V. F.—The problem of four identical particles with separable interaction —V. F. Kharchenko and V. E. Kuz'michev. 17(5), 511–6 (Nov. 1973); CPM-7407X1095

Khasanov, F. M.—The $\Delta N \to NN$ interaction —V. A. Karmanov, L. A. Kondratyuk, G. A. Leksin, and F. M. Khasanov. 18(5), 583–5 (May 1974); CPM-7409X0693

Khazins, D. M.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^- p \to e^+ e^- n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 17(1), 44–8 (Jul. 1973); CPM-7312F0196

—Measurement of the pion and nucleon form factors at the Timelike four-momentum Transfers $k^2 = 1.7$, 2.2, and 2.9 F^{-2} —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **18**(1), 53–6 (Jan. 1974); CPM-7405F0267

Khlebostroev, V. G.—Decay widths of single-nucleon quasistationary states of deformed nuclei —S. G. Kadmenskiĭ and V. G. Khlebostroev. **18**(5), 505–9 (May 1974); CPM-7409X0615

Khleskov, V. I.—An analysis of the $K\pi$ interaction up to 1 GeV —P. S. Isaev and V. I. Khleskov. **17**(1), 84–7 (Jul. 1973); CPM-7312F0236

—An investigation of the reactions $\gamma\gamma \to K\bar{K}$ and $\gamma\gamma \to \gamma\gamma$ by means of the dispersion relations —P. S. Isaev and V. I. Khleskov. **17**(2), 188–90 (Aug. 1973); CPM-7406X0738

Khlopov, M. Yu.—Possibilities of studying inelastic $\bar{\nu}_e e$ scattering reactions with high energy neutrino beams —V. N. Folomeshkin and M. Yu. Khlopov. **17**(4), 423–4 (Oct. 1973); CPM-7407X0203

Khokhlova, Z. S.—Secondary particles produced in interactions of multiply-charged relativistic nuclei with emulsion nuclei —V. E. Dudkin, Yu. V. Potapov, Z. S. Khokhlova, N. S. Shimanskaya, and R. M. Yakovlev. **18**(2), 193–4 (Feb. 1974); CPM-7407X0075

Khomich, A. A.—Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. **18**(2), 128–30 (Feb. 1974); CPM-7407X0010

—Excitation of level complexes in Si^{28} by electron inelastic scattering —I. I. Chkalov, N. G. Shevchenko, N. G. Afanas'ev, I. I. Zalyubovskiĭ, A. A. Khomich, V. N. Polishchuk, A. S. Litvinenko, and A. Yu. Buki. **18**(5), 487–9 (May 1974); CPM-7409X0597

Khoruzhiĭ, V. Kh.—Applicability of the quasiparticle excitation model in the vicinity of the saddle point of the fissionable nucleus —A. E. Savel'ev, V. Kh. Khoruzhiĭ, and S. V. Zhikareva. **17**(5), 502–6 (Nov. 1973); CPM-7407X1086

Khovanskiĭ, V. D.—Experimental study of the mechanism of the reaction $Li^6(\pi^-, \pi^- p)He^5$ —Yu. D. Bayukov, L. S. Vorob'ev, V. M. Kolybasov, G. A. Leksin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. **17**(5), 479–83 (Nov. 1973); CPM-7407X1063

—Scaling invariance effects in proton–nucleus backward scattering in the few-GeV energy range—Yu. D. Bayukov, L. S. Vorob'ev, G. A. Lesin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. **18**(6), 639–40 (Jun. 1974)

Khovorostyan, V. M.—Dependence of the yield of pions and protons emitted at $\theta_{lab} = 90°$ at $E_\gamma^{max} = 400$ MeV on the mass number of the nucleus —N. V. Goncharov, A. I. Derebchinskiĭ, O. G. Konovalov, S. G. Tonapetyan, and V. M. Khovorostyan. **17**(2), 124–7 (Aug. 1973); CPM-7406X0674

Khoze, V. A.—Angular distribution of photon brehmsstrahlung in collision of ultrarelativistic electrons —V. S. Fadin and V. A. Khoze. **18**(3), 289–94 (Mar. 1974); CPM-7409X0047

Khrenov, B. A.—Muon component of an extensive air shower near the shower axis —N. P. Il'ina, N. N. Kalmykov, J. Oleinichak, B. A. Khrenov, G. B. Khristiansen, and Z. V. Yarochkina. **18**(1), 62–9 (Jan. 1974); CPM-7405F0276

—Muon contribution to the development of electron–nuclear showers generated by cosmic rays —A. F. Knyazev, V. B. Kosarev, B. A. Khrenov, and Z. V. Yarochkina. **18**(4), 430–3 (Apr. 1974); CPM-7409X0366

—Muons in extensive air showers (interaction with matter) —N. P. Il'ina, B. A. Khrenov, and Z. V. Yarochkina. **18**(4), 440–5 (Apr. 1974); CPM-7409X0376

Khriplovich, I. B.—Charge asymmetry of the angular distribution of muons in the process $e^+e^- \to \mu^+\mu^-$ —I. B. Khriplovich. **17**(3), 298–300 (Sep. 1973); CPM-7406X0848

Khristiansen, G. B.—Muon component of an extensive air shower near the shower axis —N. P. Il'ina, N. N. Kalmykov, J. Oleinichak, B. A. Khrenov, G. B. Khristiansen, and Z. V. Yarochkina. **18**(1), 62–9 (Jan. 1974); CPM-7405F0276

—Possible existence of an anomalous interaction of muons at energies above 10 TeV —N. N. Kalmykov and G. B. Khristiansen. **18**(5), 551–3 (May 1974); CPM-7409X0661

Khrushchev, V. A.—Photoneutron cross sections for W^{182} and W^{184} — Yu. I. Sorokin, V. A. Khrushchev, and B. A. Yur'ev. **17**(1), 1–3 (Jul. 1973); CPM-7312F0153

Khudaverdyan, A. G.—Photospallation of nuclei in the energy region from 2 to 4.5 BeV —G. A. Vartapetyan, A. S. Danagulyan, N. A. Demëkhina, and A. G. Khudaverdyan. **17**(4), 356–9 (Oct. 1973); CPM-7407X0136

—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. **18**(4), 420–3 (Apr. 1974); CPM-7409X0356

Khurshudyan, L. S.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. **18**(4), 420–3 (Apr. 1974); CPM-7409X0356

Khvastunov, V. M.—Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. **18**(2), 128–30 (Feb. 1974); CPM-7407X0010

Kienzle, W.—Elastic $\pi^- p$, $K^- p$, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. **18**(2), 182–6 (Feb. 1974); CPM-7407X0064

Kienzle-Focacci, M. N.—Elastic $\pi^- p$, $K^- p$, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. **18**(2), 182–6 (Feb. 1974); CPM-7407X0064

Kildyushov, M. S.—Certain symmetry properties of the t-coefficients —M. S. Kildyushov and G. I. Kuznetsov. **17**(6), 693–5 (Dec. 1973); CPM-7408X0499

Kirillov, A. D.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskii, and M. I. Yatsuta. **18**(1), 41–4 (Jan. 1974); CPM-7405F0255

Kirillova, L. F.—Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. **18**(2), 179–81 (Feb. 1974); CPM-7407X0061

Kirillov-Ugryumov, V. G.—Coherent generation of the system $2\pi^- \pi^+$ on nuclei —A. D. Vasil'kova, M. G. Gornov, V. G. Kirillov-Ugryumov, V. P. Protasov, and F. M. Sergeev. **17**(2), 166–70 (Aug. 1973); CPM-7406X0716

Kirpichnikov, I. V.—Excitation of O^{16} levels by high-energy protons —Yu. M. Goryachev, V. P. Kanavets, I. V. Kirpichnikov, I. I. Levintov, B. V. Morozov, N. A. Nikiforov, and A. S. Starostin. **17**(5), 476–8 (Nov. 1973); CPM-7407X1060

Kishkurno, V. V.—Study of the backward ρ^--meson production in the reaction $\pi^- p \to pp^-$ in the primary-momentum range 1.80–3.25 GeV/c —V. V. Vladimirskiĭ, R. I. Dzhelyadin, I. A. Dukhovskoi, V. V. Kishkurno, A. P. Krutenkova, V. V. Kulikov, I. A. Radkevich, and V. S. Fedorets. **17**(4), 411–2 (Oct. 1973); CPM-7407X0191

Kiss, D.—Search for a new vector meson in K_L^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. **18**(4), 424–5 (Apr. 1974); CPM-7409X0360

Klanner, R.—Elastic $\pi^- p$, $K^- p$, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. **18**(2), 182–6 (Feb. 1974); CPM-7407X0064

Kliger, G. K.—f^0-meson production in the reaction $\pi^- p \to p\pi^+\pi^-\pi^-$ at a momentum 4.5 GeV/c —G. K. Kliger, V. Z. Kolganov, V. T. Smolyankin, and A. F. Nilov. **17**(3), 286–8 (Sep. 1973); CPM-7406X0836

Klyucharev, A. P.—Radiative capture of protons by Zn^{64}, Zn^{66}, and Zn^{68} nuclei —B. A. Nemashkalo, V. E. Storizhko, V. F. Boldyshev, O. I. Ekhichev, A. P. Klyucharev, and A. I. Popov. 17(2), 117–9 (Aug. 1973); CPM-7406X0667

Knat'ko, V. A.—Structure of lower levels of Ni^{59} and role of simple configurations in the de-excitation of the capture state in the reaction $Ni^{58}(n, \gamma)Ni^{59}$ —V. A. Knat'ko, V. I. Nelaeva, and E. A. Rudak. 17(2), 134–6 (Aug. 1973); CPM-7406X0684

Knyazev, A. F.—Muon contribution to the development of electron–nuclear showers generated by cosmic rays —A. F. Knyazev, V. B. Kosarev, B. A. Khrenov, and Z. V. Yarochkina. 18 (4), 430–3 (Apr. 1974); CPM-7409X0366

Kobrinskiĭ, M. N.—The average multiplicities of particles in the quark model —V. V. Anisovich, M. N. Kobrinskiĭ, A. K. Likhoded, and V. M. Shekhter. 17(3), 343–4 (Sep. 1973); CPM-7406X0893

—Allowance for the triangular singularity in the partial-wave analysis of a three-meson system —M. N. Kobrinskiĭ and A. K. Likhoded. 17(6), 683–7 (Dec. 1973); CPM-7408X0489

—Inclusive hadron photoproduction in the quark model —M. N. Kobrinskiĭ. 18(1), 93–4 (Jan. 1974); CPM-7405F0307

—Effect of polarization on inclusive hadron spectra —M. N. Kobrinskiĭ and A. K. Likhoded. 18(4), 460–1 (Apr. 1974); CPM-7409X0396

Kobylinskiĭ, N. A.—Large-angle scattering in the "DAMA" model —A. I. Bugriĭ, L. L. Jenkovszky, and N. A. Kobylinskiĭ. 17(3), 319–21 (Sep. 1973); CPM-7406X0869

—DAMA single-particle distributions —L. L. Jenkovszky, N. A. Kobylinskiĭ, and E. S. Martynov. 18(5), 573–6 (May 1974); CPM-7409X0683

Kobzev, A. P.—Transition radiation at the angle of total internal reflection of light from the medium —A. P. Kobzev, S. Mihaliak, E. Rutkovsky, and I. M. Frank. 18(4), 446–8 (Apr. 1974); CPM-7409X0382

Kochetov, A. B.—Deformation parameters for light nuclei —Yu. T. Grin' and A. B. Kochetov. 18(2), 145–6 (Feb. 1974); CPM-7407X0027

Kochubei, E. F.—Spontaneously fissioning isomer U^{238m} excited by capture of thermal neutrons —L. A. Popeko, G. A. Petrov, E. F. Kochubei, and T. K. Zvezdkina. 17(2), 120–3 (Aug. 1973); CPM-7406X0670

Kohli, J. M.—Generation of charged particles by π mesons on light nuclei at high energy —V. G. Grishin, S. M. Eliseev, Sh. V. Inogamov, and J. M. Kohli. 17(5), 531–4 (Nov. 1973); CPM-7407X1115

Kolesnikov, L. Ya.—Determination of the degree of polarization of coherent bremsstrahlung from a diamond single crystal —V. G. Gorbenko, L. M. Derkach, Yu. V. Zhebrovskiĭ, L. Ya. Kolesnikov, and A. L. Rubashkin. 17(4), 413–6 (Oct. 1973); CPM-7407X0193

Kolganov, V. Z.—f^0-meson production in the reaction $\pi^- p \to p\pi^+\pi^-\pi^-$ at a momentum 4.5 GeV/c —G. K. Kliger, V. Z. Kolganov, V. T. Smolyankin, and A. F. Nilov. 17(3), 286–8 (Sep. 1973); CPM-7406X0836

Kolganova, E. D.—Inelastic interactions and proton stripping for 9.4–GeV/c deuterons in emulsion —A. O. Vaisenberg, E. D. Kolganova, and N. V. Rabin. 18(6), 635–8 (Jun. 1974); CPM-7409X0469

Kolkunov, V. A.—Investigations of the WKB approximation within the framework of the exponential method —V. A. Kolkunov and V. N. Mel'nikov. 17(4), 452–7 (Oct. 1973); CPM-7407X0232

Kolomiets, V. M.—Shell corrections to nuclear masses in presence of pairing —V. M. Kolomiets. 18(2), 147–50 (Feb. 1974); CPM-7407X0029

—Nature of excited states of Zn^{69}, Ge^{71}, $Se^{77,79,81}$ nuclei produced in capture of thermal neutrons —A. V. Murzin and V. M. Kolomiets. 18(3), 246–9 (Mar. 1974); CPM-7409X0004

Kolosov, N. P.—Yields and kinetic energies of fragments from spontaneous and induced fission of Pu^{242} —N. P. D'yachenko, V. N. Kabenin, N. P. Kolosov, B. D. Kuz'minov, and A. I. Sergachev. 17(4), 362–5 (Oct. 1973); CPM-7407X0142

Kolybasov, V. M.—Amplitude of pion–deuteron scattering in the region of the Δ (1236) resonance energy —V. M. Kolybasov and A. E. Kudryavtsev. 17(1), 22–6 (Jul. 1973); CPM-7312F0174

—Experimental study of the mechanism of the reaction $Li^6(\pi^-, \pi^- p)He^5$ —Yu. D. Bayukov, L. S. Vorob'ev, V. M. Kolybasov, G. A. Leksin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 17 (5), 479–83 (Nov. 1973); CPM-7407X1063

—Theoretical approach to elastic pd scattering at large angles —V. M. Kolybasov and N. Ya. Smorodinskaya. 17(6), 630–5 (Dec. 1973); CPM-7408X0436

—Nonadiabatic effects in high-energy scattering of particles by nuclei —V. M. Kolybasov and L. A. Kondratyuk. 18(2), 162–7 (Feb. 1974); CPM-7407X0044

—Isobar mechanism of pion double charge exchange at high energy —O. D. Dal'karov and V. M. Kolybasov. 18(4), 416–9 (Apr. 1974); CPM-7409X0352

Komech, A. I.—Consequences from microcausality for the electroproduction process —B. V. Geshkenbein and A. I. Komech. 18(4), 473–7 (Apr. 1974); CPM-7409X0409

Kondratyuk, L. A.—Nonadiabatic effects in high-energy scattering of particles by nuclei —V. M. Kolybasov and L. A. Kondratyuk. 18 (2), 162–7 (Feb. 1974); CPM-7407X0044

—The $\Delta N \to NN$ interaction —V. A. Karmanov, L. A. Kondratyuk, G. A. Leksin, and F. M. Khasanov. 18(5), 583–5 (May 1974); CPM-7409X0693

Konovalov, O. G.—Dependence of the yield of pions and protons emitted at $\theta_{lab} = 90°$ at $E_\gamma^{max} = 400$ MeV on the mass number of the nucleus —N. V. Goncharov, A. I. Derebchinskiĭ, O. G. Konovalov, S. G. Tonapetyan, and V. M. Khovorostyan. 17(2), 124–7 (Aug. 1973); CPM-7406X0674

Konstantinov, B. D.—Influence of nuclear shell structure on the polarization of elastically scattered neutrons —F. A. Ivanyuk and B. D. Konstantinov. 18(6), 616–8 (Jun. 1974); CPM-7409X0450

Konstantinov, V. F.—Measurement of the $K^- p \to \bar{K}^0 n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. 17(6), 638–40 (Dec. 1973); CPM-7408X0444

Konyukhova, N. B.—Bound quasinuclear states of the system $2N2\bar{N}$ —E. S. Birger, B. O. Kerbikov, N. B. Konyukhova, and I. S. Shapiro. 17(1), 92–5 (Jul. 1973); CPM-7312F0244

Kopeliovich, B. Z.—Pion coupling constant and pionic radius of He^3 —B. Z. Kopeliovich. 18(6), 594–6 (Jun. 1974); CPM-7409X0428

Kopeliovich, V. B.—Single hyperon production in pN collisions at low energies —V. B. Kopeliovich. 18(1), 90–2 (Jan. 1974); CPM-7405F0304

—The Bethe phase-shift and measurement of the Ref/Imf ratio in high-energy scattering by protons and deuterons —V. B. Kopeliovich. 18(2), 210–3 (Feb. 1974); CPM-7407X0092

Kopylov, G. I.—Multiple production and interference of particles emitted by moving sources —G. I. Kopylov and M. I. Podgoretskiĭ. 18(3), 336–41 (Mar. 1974); CPM-7409X0094

Korennoĭ, v. P.—Investigation of the nodes of the wave functions of the relative motion of the lightest nuclei $\alpha\alpha$ and πt with the aid of the quasielastic knockout form factors and scattering phase shifts —v. P. Korennoĭ, I. V. Kurdyumov, V. G. Neudachin, and Yu. F. Smirnov. 17(4), 391–6 (Oct. 1973); CPM-7407X0171

Korochkin, A. M.—Measurement of the effective cross section for the fission of the $Cm^{244-248}$ isotopes by neutrons from a fast reactor —E. F. Fomushkin, E. K. Gutnikova, B. K. Maslennikov, and A. M. Korochkin. 17(1), 12–4 (Jul. 1973); CPM-7312F0164

Korol'kov, I. Ya.—The charge-exchange reaction $K^- p \to \bar{K}^0 n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Korostylev, V. A.—Fission of U^{233} and U^{235} by thermal neutrons —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(4), 364–8 (Apr. 1974); CPM-7409X0300

—Spontaneous fission of Cf^{252} —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(6), 589–93 (Jun. 1974); CPM-7409X0423

Kosarev, V. B.—Muon contribution to the development of electron–nuclear showers generated by cosmic rays —A. F. Knyazev, V. B. Kosarev, B. A. Khrenov, and Z. V. Yarochkina. 18 (4), 430–3 (Apr. 1974); CPM-7409X0366

Kotel'nikova, G. V.—Direct processes in the inelastic scattering of 14.4–MeV neutrons by Nb and Co nuclei —O. A. Sal'nikov, E. M. Saprykin, G. V. Kotel'nikova, G. N. Lovchikova, A. A. Luk'yanov, and N. I. Fetisov. 17(5), 523–5 (Nov. 1973); CPM-7407X1107

Kotikov, E. A.—The reaction $Li^7(\gamma, pt)H^3$ at $E_\gamma \leq 27$ MeV—E. A. Kotikov and E. D. Makhnovskiĭ. **18**(2), 125–7 (Feb. 1974); CPM-7407X0007

Kotov, A. A.—An investigation of the fission of U^{238} and Bi^{209} by 1-GeV protons —A. A. Kotov, G. G. Semenchuk, B. A. Bochagov, B. L. Gorshkov, G. G. Kovshevnyĭ, V. R. Reznik, and G. E. Solyakin. **17**(5), 498–501 (Nov. 1973); CPM-7407X1082

Kotova, L. P.—$3\pi\gamma$ interaction in the inelastic scattering of pions by heavy nuclei —G. S. Iroshnikov and L. P. Kotova. **17**(5), 545–8 (Nov. 1973); CPM-7407X1129

Kovshevnyĭ, G. G.—An investigation of the fission of U^{238} and Bi^{209} by 1-GeV protons —A. A. Kotov, G. G. Semenchuk, B. A. Bochagov, B. L. Gorshkov, G. G. Kovshevnyĭ, V. R. Reznik, and G. E. Solyakin. **17**(5), 498–501 (Nov. 1973); CPM-7407X1082

Kozlov, V. E.—Possible behavior of the inelastic cross section of the nucleon interaction with air nuclei at energies higher than 30 GeV —V. V. Akimov, V. E. Kozlov, and V. Ya. Shestoperov. **17**(5), 535–6 (Nov. 1973); CPM-7407X1119

Kozlovskiĭ, I. V.—Calculation of the cross section of the reaction $He^3(e, e'p)H^2$ by the K-harmonics method. comparison with other calculations —V. K. Tartakovskiĭ and I. V. Kozlovskiĭ. **17**(2), 142–5 (Aug. 1973); CPM-7406X0692

Krasnokutskiĭ, R. N.—Nuclear absorption cross sections for pions, kaons, protons, and antiprotons in the momentum range 6–60 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, R. N. Krasnokutskiĭ, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. **18**(2), 173–8 (Feb. 1974); CPM-7407X0055

Kristov, L. G.—Elastic pd scattering at 5 GeV in the coulomb–nuclear interference region —Z. M. Zlatanov, L. G. Kristov, and P. A. Devenski. **17**(1), 49–50 (Jul. 1973); CPM-7312F0201

Krive, I. V.—Dispersion sum rules and vector form factors of the weak $N \to \Delta$ transition —I. V. Krive. **17**(6), 664–6 (Dec. 1973); CPM-7408X0470

Krivokhizhin, V. G.—Search for a new vector meson in K_1^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. **18**(4), 424–5 (Apr. 1974); CPM-7409X0360

Krupchitskiĭ, P. A.—T-invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. **18**(1), 6–9 (Jan. 1974); CPM-7405F0220

Krutenkova, A. P.—Study of the backward ρ^- meson production in the reaction $\pi^- p \to p\rho^-$ in the primary–momentum range 1.80–3.25 GeV/c —V. V. Vladimirskiĭ, R. I. Dzhelyadin, I. A. Dukhovskoi, V. V. Kishkurno, A. P. Krutenkova, V. V. Kulikov, I. A. Radkevich, and V. S. Fedorets. **17**(4), 411–2 (Oct. 1973); CPM-7407X0191

Kucher, A. M.—Search for α emission in the decay of spontaneously fissionable isomers —A. G. Belov, Yu. P. Gangrskiĭ, B. Dalkhsuren, A. M. Kucher, and Nguen Kong Khan. **17**(5), 493–5 (Nov. 1973); CPM-7407X1077

Kudryavtsev, A. E.—Amplitude of pion–deuteron scattering in the region of the Δ (1236) resonance energy —V. M. Kolybasov and A. E. Kudryavtsev. **17**(1), 22–6 (Jul. 1973); CPM-7312F0174

Kudryavtsev, V. A.—Particle polarization in inclusive reactions —V. A. Kudryavtsev and E. M. Levin. **18**(2), 232–7 (Feb. 1974); CPM-7407X0114

Kuleshov, S. P.—Multiple production of charged particles in $\pi^- p$ and $\pi^- n$ interactions at 40 GeV/c —V. G. Grishin, S. P. Kuleshov, V. A. Matveev, A. N. Sisakyan, and G. Yancso. **17**(6), 667–8 (Dec. 1973); CPM-7408X0473

Kulikov, A. V.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^- p \to e^+ e^- n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **17**(1), 44–8 (Jul. 1973); CPM-7312F0196

—Measurement of the pion and nucleon form factors at the Timelike four–momentum Transfers $k^2 = 1.7, 2.2$, and $2.9\ F^{-2}$ —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **18**(1), 53–6 (Jan. 1974); CPM-7405F0267

Kulikov, V. V.—Study of the backward ρ^- meson production in the reaction $\pi^- p \to p\rho^-$ in the primary–momentum range 1.80–3.25 GeV/c —V. V. Vladimirskiĭ, R. I. Dzhelyadin, I. A. Dukhovskoi, V. V. Kishkurno, A. P. Krutenkova, V. V. Kulikov, I. A. Radkevich, and V. S. Fedorets. **17**(4), 411–2 (Oct. 1973); CPM-7407X0191

Kumpf, H.—Coulomb corrections to the proton–proton scattering parameters and p^2–dependence of nuclear interactions —H. Kumpf. **17**(6), 602–4 (Dec. 1973); CPM-7408X0408

Kuplennikov, E. L.—Inelastic electromagnetic form factors of K^{39} and Ca^{40} —V. G. Vlasenko, N. G. Afanas'ev, V. A. Gol'dshtein , S. V. Dementiĭ, E. L. Kuplennikov, V. I. Ogurtsov, and V. I. Startsev. **17**(6), 585 (Dec. 1973); CPM-7408X0391

—Study of quasielastic high energy electron scattering on light nuclei —É. L. Kuplennikov, N. G. Afanas'ev, V. A. Gol'dshtein, V. I. Ogurtsov, and V. G. Vlasenko. **18**(1), 10–1 (Jan. 1974); CPM-7405F0224

Kuptsov, A. V.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^- p \to e^+ e^- n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **17**(1), 44–8 (Jul. 1973); CPM-7312F0196

—Measurement of the pion and nucleon form factors at the Timelike four–momentum Transfers $k^2 = 1.7, 2.2$, and $2.9\ F^{-2}$ —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **18**(1), 53–6 (Jan. 1974); CPM-7405F0267

Kuraev, E. A.—High–energy behavior of total cross sections for e^+e^- scattering and the Lamb shift —E. A. Kuraev, L. N. Lipatov, and N. P. Merenkov. **18**(5), 554–61 (May 1974); CPM-7409X0664

—Identity of final–state electrons in pair production in colliding e^+e^- beams —E. A. Kuraev, L. N. Lipatov, and M. I. Strikman. **18**(6), 652–7 (Jun. 1974); CPM-7409X0486

Kurbatov, V. S.—Determination of the $\pi\pi$ scattering length a_0 from the analysis of experimental data on τ decay —S. A. Bunyatov, G. R. Gulkanyan, and V. S. Kurbatov. **17**(6), 681–2 (Dec. 1973); CPM-7408X0487

—The reaction $\pi^- p \to \pi^+ \pi^- n$ near threshold —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, V. S. Kurbatov, V. M. Sidorov, and V. A. Yarba. **18**(4), 426–9 (Apr. 1974); CPM-7409X0362

Kurdyumov, I. V.—Investigation of the nodes of the wave functions of the relative motion of the lightest nuclei αd and πt with the aid of the quasielastic knockout form factors and scattering phase shifts —v. P. Korennoĭ, I. V. Kurdyumov, V. G. Neudachin, and Yu. F. Smirnov. **17**(4), 391–6 (Oct. 1973); CPM-7407X0171

Kurochkin, V. P.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^- p \to e^+ e^- n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **17**(1), 44–8 (Jul. 1973); CPM-7312F0196

—Measurement of the pion and nucleon form factors at the Timelike four–momentum Transfers $k^2 = 1.7, 2.2$, and $2.9\ F^{-2}$ —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **18**(1), 53–6 (Jan. 1974); CPM-7405F0267

Kut'in, V. M.—Measurement of the $K^- p \to \bar{K}^0 n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. **17**(6), 638–40 (Dec. 1973); CPM-7408X0444

—An investigation of $K^- p \to \bar{K}^0 n$ charge exchange at 25 and 35 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, V. E. Postoev, Yu. D. Prokoshkin, and V. K. Semenov. **18**(5), 546–50 (May 1974); CPM-7409X0656

—The reaction $\pi^- p \to \pi^0 n$ in the momentum region up to 50 GeV/c — V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, Yu. D. Prokoshkin, E. A. Razuvaev, and V. K. Semenov. **18**(6), 648–51 (Jun. 1974); CPM-7409X0482

Kutuev, R. Kh.—Real part of the spinless pp–scattering amplitude at zero angle from 0.135 to 1.700 BeV/c —I. V. Amirkhanov, V. M. Bystritskiĭ, L. S. Vertogradov, R. Ya. Zul'karneev, R. Kh. Kutuev, Kh. Murtazaev, V. S. Nadezhdin, and V. I. Satarov. **17**(6), 636–7 (Dec. 1973); CPM-7408X0442

Kuz'michev, V. E.—The problem of four identical particles with separable interaction —V. P. Kharchenko and V. E. Kuz'michev. 17(5), 511–6 (Nov. 1973); CPM-7407X1095

Kuz'minov, B. D.—Yields and kinetic energies of fragments from spontaneous and induced fission of Pu^{242} —N. P. D'yachenko, V. N. Kabenin, N. P. Kolosov, B. D. Kuz'minov, and A. I. Sergachev. 17(4), 362–5 (Oct. 1973); CPM-7407X0142

—Fragment characteristics in fission of the compound nucleus U^{236} induced by neutrons and α particles —A. F. Pavlov, V. N. Okolovich, P. P. D'yachenko, and B. D. Kuz'minov. 17(6), 595–7 (Dec. 1973); CPM-7408X0401

Kuznetsov, B. I.—Back scattering of α particles by C^{12} and C^{13} —B. I. Kuznetsov, I. P. Chernov, and R. E. Ovsyannikova. 18(5), 490–1 (May 1974); CPM-7409X0600

Kuznetsov, G. I.—Certain symmetry properties of the t–coefficients —M. S. Kildyushov and G. I. Kuznetsov. 17(6), 693–5 (Dec. 1973); CPM-7408X0499

Kuznetsov, V. A.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskii, and M. I. Yatsuta. 18(1), 41–4 (Jan. 1974); CPM-7405F0255

L

Laitay, A.—Search for a spontaneously fissioning isomer nucleus U^{236m} in the reaction $U^{235}(n, \gamma)$ —Zen Chang Bom, A. Laitay, A. A. Omelyanenko, Ts. Ts. Panteleev, S. M. Polikanov, Yu. V. Ryabov, and Tang San Khak. 18(1), 18–9 (Jan. 1974); CPM-7405F0232

Landsberg, L. G.—Elastic π^-p, K^-p, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. 18(2), 182–6 (Feb. 1974); CPM-7407X0064

Laperashvili, L. V.—Pomeranchuk cuts in the dual resonance model and total cross sections at high energies —L. V. Laperashvili and M. G. Safro. 17(2), 216–20 (Aug. 1973); CPM-7406X0766

Lapidus, L. I.—Baryon polarization in small–angle scattering by nuclei —L. I. Lapidus. 17(3), 307–12 (Sep. 1973); CPM-7406X0857

Lason, L.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. 17(1), 6–9 (Jul. 1973); CPM-7312F0158

Lazarev, Yu. A.—Prompt neutrons in the spontaneous fission of Cf^{246} —M. Dakovskiĭ, Yu. A. Lazarev, Yu. Ts. Oganesyan, and G. V. Buklanov. 17(4), 360–1 (Oct. 1973); CPM-7407X0140

—Prompt–neutron multiplicity in spontaneous fission —D. M. Dakovskiĭ, Yu. A. Lazarev, and Yu. Ts. Oganesyan. 18(4), 371–6 (Apr. 1974); CPM-7409X0307

Lebedev, A. A.—Elastic π^-p, K^-p, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. 18(2), 182–6 (Feb. 1974); CPM-7407X0064

Lebedev, A. N.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. 18(4), 420–3 (Apr. 1974); CPM-7409X0356

Lebedeva, N. S.—Two elastic scattering mechanisms in the optical model of the nucleus —V. M. Morozov, Yu. G. Zubov, and N. S. Lebedeva. 17(4), 381–5 (Oct. 1973); CPM-7407X0161

Lechanoine, C.—Elastic π^-p, K^-p, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. 18(2), 182–6 (Feb. 1974); CPM-7407X0064

Lecomte, P.—Elastic π^-p, K^-p, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. 18(2), 182–6 (Feb. 1974); CPM-7407X0064

Lednev, A. A.—Measurement of the $K^-p \to \bar{K}^0n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. 17(6), 638–40 (Dec. 1973); CPM-7408X0444

Leksin, G. A.—Experimental study of the mechanism of the reaction $Li^6(\pi^-, \pi^-p)He^5$ —Yu. D. Bayukov, L. S. Vorob'ev, V. M. Kolybasov, G. A. Leksin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 17(5), 479–83 (Nov. 1973); CPM-7407X1063

—The ΔN→NN interaction —V. A. Karmanov, L. A. Kondratyuk, G. A. Leksin, and F. M. Khasanov. 18(5), 583–5 (May 1974); CPM-7409X0693

Lesin, L. S.—Scaling invariance effects in proton–nucleus backward scattering in the few–GeV energy range —Yu. D. Bayukov, L. S. Vorob'ev, G. A. Lesin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 18(6), 639–40 (Jun. 1974)

Levin, E. M.—The possibility of a constant total cross section in multiperipheral models —E. M. Levin and M. G. Ryskin. 17(2), 199–207 (Aug. 1973); CPM-7406X0749

—Asymptotic behavior of the cross section with $T = 1$ in the multiperipheral model —E. M. Levin and M. G. Ryskin. 18(2), 223–5 (Feb. 1974); CPM-7407X0105

—Particle polarization in inclusive reactions —V. A. Kudryavtsev and E. M. Levin. 18(2), 232–7 (Feb. 1974); CPM-7407X0114

—Production of particles with large transverse momenta in the pionization region —E. M. Levin and M. G. Ryskin. 18(5), 570–2 (May 1974); CPM-7409X0680

Levina, V. I.—Analysis of the reaction $\pi^-N(A) \to 2\pi^-\pi^+N(A)$ in momentum space —A. D. Vasil'kova, M. G. Gornov, V. I. Levina, V. P. Protasov, and F. M. Sergeev. 18(2), 190–2 (Feb. 1974); CPM-7407X0072

Levintov, I. I.—Excitation of O^{16} levels by high–energy protons —Yu. M. Goryachev, V. P. Kanavets, I. V. Kirpichnikov, I. I. Levintov, B. V. Morozov, N. A. Nikiforov, and A. S. Starostin. 17(5), 476–8 (Nov. 1973); CPM-7407X1060

Levkovskiĭ, V. N.—Cross sections of (n,p) and (n,α) reactions at a neutron energy 14–15 MeV —V. N. Levkovskiĭ. 18(4), 361–3 (Apr. 1974); CPM-7409X0297

Likhachev, M. F.—Search for a new vector meson in K_L^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kisa, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. 18(4), 424–5 (Apr. 1974); CPM-7409X0360

Likhachev, V. P.—Electron scattering by $Zn^{64,66}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. 18(2), 128–30 (Feb. 1974); CPM-7407X0010

Likhoded, A. K.—The average multiplicities of particles in the quark model —V. V. Anisovich, M. N. Kobrinskiĭ, A. K. Likhoded, and V. M. Shekhter. 17(3), 343–4 (Sep. 1973); CPM-7406X0893

—Allowance for the triangular singularity in the partial–wave analysis of a three–meson system —M. N. Kobrinskiĭ and A. K. Likhoded. 17(6), 683–7 (Dec. 1973); CPM-7408X0489

—Effect of polarization on inclusive hadron spectra —M. N. Kobrinskiĭ and A. K. Likhoded. 18(4), 460–1 (Apr. 1974); CPM-7409X0396

Lipatov, L. N.—High–energy behavior of total cross sections for e^+e^- scattering and the Lamb shift —E. A. Kuraev, L. N. Lipatov, and N. P. Merenkov. 18(5), 554–61 (May 1974); CPM-7409X0664

—Identity of final–state electrons in pair production in colliding e^+e^- beams —E. A. Kuraev, L. N. Lipatov, and M. I. Strikman. 18(6), 652–7 (Jun. 1974); CPM-7409X0486

Lipmanov, É. M.—Sign of muon charge asymmetry in the reaction $e^-e^+ \to \mu^-\mu^+$ and models of unified electromagnetic–weak interaction —É. M. Lipmanov and N. V. Mikheev. 18(2), 199–200 (Feb. 1974); CPM-7407X0081

Litvin, V. F.—Isotope effect in nuclear reactions with high–energy particles —V. I. Bogatin, V. K. Bondarev, V. F. Litvin, O. V. Lozhkin, N. A. Perfilov, and Yu. P. Yakovlev. 17(1), 4–5 (Jul. 1973); CPM-7312F0156

Litvinenko, A. S.—Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. **18**(2), 128–30 (Feb. 1974); CPM-7407X0010

—Excitation of level complexes in Si^{28} by electron inelastic scattering —I. I. Chkalov, N. G. Shevchenko, N. G. Afanas'ev, I. I. Zalyubovskiĭ, A. A. Khomich, V. N. Polishchuk, A. S. Litvinenko, and A. Yu. Buki. **18**(5), 487–9 (May 1974); CPM-7409X0597

Loktionov, M. V.—Dual model without tachyons, having a Virasoro symmetry, and simplest loop diagrams —M. V. Loktionov and M. M. Nesterov. **17**(1), 78–83 (Jul. 1973); CPM-7312F0230

Lomanov, M. F.—Cross section and angular anisotropy of fission of U^{238}, Bi^{209}, $Pb^{208-206}$, and Au^{197} by 70–200 MeV protons —V. S. Bychenkov, M. F. Lomanov, A. I. Obukhov, N. A. Perfilov, O. E. Shigaev, G. G. Shimchuk, and R. M. Yakovlev. **17**(5), 496–7 (Nov. 1973); CPM-7407X1080

Losev, V. A.—Spectrum and polarization of synchrotron radiation in the case of strong radiation friction —D. V. Gal'tsov and V. A. Losev. **17**(1), 57–8 (Jul. 1973); CPM-7312F0209

Lovchikova, G. N.—Direct processes in the inelastic scattering of 14.4–MeV neutrons by Nb and Co nuclei —O. A. Sal'nikov, E. M. Saprykin, G. V. Kotel'nikova, G. N. Lovchikova, A. A. Luk'yanov, and N. I. Fetisov. **17**(5), 523–5 (Nov. 1973); CPM-7407X1107

Lozhkin, O. V.—Isotope effect in nuclear reactions with high–energy particles —V. I. Bogatin, V. K. Bondarev, V. F. Litvin, O. V. Lozhkin, N. A. Perfilov, and Yu. P. Yakovlev. **17**(1), 4–5 (Jul. 1973); CPM-7312F0156

Lukáč, I.—On the complete set of observables on a sphere in the three–dimensional complex space —I. Lukáč and L. Toth. **17**(6), 696–700 (Dec. 1973); CPM-7408X0502

—Mass formula in SU(3) symmetry with elliptical basis —I. Lukáč. **18**(1), 105–8 (Jan. 1974); CPM-7405F0319

Luk'yanov, A. A.—Direct processes in the inelastic scattering of 14.4–MeV neutrons by Nb and Co nuclei —O. A. Sal'nikov, E. M. Saprykin, G. V. Kotel'nikova, G. N. Lovchikova, A. A. Luk'yanov, and N. I. Fetisov. **17**(5), 523–5 (Nov. 1973); CPM-7407X1107

Luk'yanov, V. K.—Excitation of nuclei by particles of near–barrier energies —V. K. Luk'yanov and A. I. Titov. **18**(2), 157–61 (Feb. 1974); CPM-7407X0039

Luzin, V. N.—The charge–exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. **18**(3), 279–80 (Mar. 1974); CPM-7409X0037

Lykasov, G. I.—Spin effects in the theory of pHe^4 scattering —G. I. Lykasov and A. V. Tarasov. **17**(2), 153–6 (Aug. 1973); CPM-7406X0703

—Energy spectra and polarization of protons from the reaction pd → ppn at 600 MeV —B. M. Golovin, G. I. Lykasov, A. M. Rozanova, and F. Sh. Khamraev. **18**(2), 171–2 (Feb. 1974); CPM-7407X0053

—Elastic pHe^3 scattering in the Glauber model with spin —G. I. Lykasov and A. V. Tarasov. **18**(6), 619–20 (Jun. 1974); CPM-7409X0453

Lyul'ka, V. A.—Nuclear reactions in muonic atoms —D. F. Zaretskiĭ and V. A. Lyul'ka. **17**(2), 139–41 (Aug. 1973); CPM-7406X0689

M

Makarov, G. P.—Measurement of the $K^-p \to \bar{K}^0n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. **17**(6), 638–40 (Dec. 1973); CPM-7408X0444

Makarov, M. M.—Isospin analysis of inelastic pion–nucleon scattering in the energy interval 300–500 MeV —M. M. Makarov, G. Z. Obrant, and V. V. Sarantsev. **17**(1), 88–91 (Jul. 1973); CPM-7312F0240

Makeev, V. V.—Direct $\mu^+\mu^-$ and $e^+\mu m^-$ pair production in a neutrino beam —V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov, and A. A. Sokolov. **17**(4), 420–2 (Oct. 1973); CPM-7407X0200

Makhnovskiĭ, E. D.—The reaction $Li^7(\gamma, pt)H^3$ at $E_\gamma < 27$ MeV—E. A. Kotikov and E. D. Makhnovskiĭ. **18**(2), 125–7 (Feb. 1974); CPM-7407X0007

Maksyutenko, B. P.—Mass and charge balance in fission and delayed neutrons —B. P. Maksyutenko. **17**(3), 246–50 (Sep. 1973); CPM-7406X0796

—New approach to the search for the distribution of delayed–neutron precursors —M. Z. Tarasko and B. P. Maksyutenko. **17**(6), 598–601 (Dec. 1973); CPM-7408X0404

Malinovskiĭ, E. I.—Study of electron–photon showers in lead in the 150–550 MeV energy region —A. S. Belousov, E. I. Malinovskiĭ, S. V. Rusakov, V. V. Samedov, and P. N. Shareiko. **17**(5), 537–9 (Nov. 1973); CPM-7407X1121

Malkin, I. A.—Scattering of light by a charge in an external electromagnetic field —E. V. Doktorov, I. A. Malkin, and V. I. Man'ko. **18**(1), 74–8 (Jan. 1974); CPM-7405F0288

Malyarov, V. V.—Approximating the S matrix by means of rational functions —V. V. Malyarov and M. N. Popushoĭ. **18**(5), 586–8 (May 1974); CPM-7409X0696

Mamedov, T. N.—Spectra of the neutrons from the absorption of negative muons by heavy nuclei, and the resonance model of nuclear reactions —V. S. Evseev and T. N. Mamedov. **18**(5), 499–502 (May 1974); CPM-7409X0609

Mameev, V. V.—Determination of the cross section of photodisintegration of emulsion nuclei by 1.0–4.5 GeV γ–quanta —Dzh. A. Galstyan, A. M. Zverev, V. V. Mameev, and M. A. Martirosyan. **17**(5), 474–5 (Nov. 1973); CPM-7407X1058

Mamidzhanyan, É. A.—Measurement of the total nucleon inelasticity coefficient in the interaction with iron nuclei —M. O. Azaryan, É. A. Mamidzhanyan, and R. A. Suleimanov. **17**(3), 291–2 (Sep. 1973); CPM-7406X0841

—A possible approximation of the experimental data on the secondary pion energies in nn collisions in c.m.s. —M. I. Keropyan and É. A. Mamidzhanyan. **18**(2), 195–6 (Feb. 1974); CPM-7407X0077

Mamudzhanyan, É. A.—Inelasticity of interactions of 1–10 TeV nucleons with lead nuclei —M. O. Azaryan and É. A. Mamudzhanyan. **17**(3), 289–90 (Sep. 1973); CPM-7406X0839

Manevich, L. G.—Distribution of particle–hole states —P. É. Nemirovskiĭ and L. G. Manevich. **18**(2), 151–6 (Feb. 1974); CPM-7407X0033

Manida, S. N.—Construction of factorizable dual amplitudes on the basis of classical group representations by functions of several complex variables —S. N. Manida and V. A. Franke. **18**(3), 321–3 (Mar. 1974); CPM-7409X0079

Man'ko, V. I.—Scattering of light by a charge in an external electromagnetic field —E. V. Doktorov, I. A. Malkin, and V. I. Man'ko. **18**(1), 74–8 (Jan. 1974); CPM-7405F0288

Manukyan, Zh. V.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. **18**(4), 420–3 (Apr. 1974); CPM-7409X0356

Mareev, Yu. D.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. **17**(1), 6–9 (Jul. 1973); CPM-7312F0158

Marshalkin, V. E.—Adiabatic excitation of fissioning nucleus —V. E. Marshalkin. **17**(3), 255–7 (Sep. 1973); CPM-7406X0805

—Penetration of a double–hump potential barrier —A. S. Tyapin and V. E. Marshalkin. **18**(2), 142–4 (Feb. 1974); CPM-7407X0024

Martin, M.—Elastic π^-p, K^-p, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. **18**(2), 182–6 (Feb. 1974); CPM-7407X0064

Martirosyan, M. A.—Determination of the cross section of photodisintegration of emulsion nuclei by 1.0–4.5 GeV γ–quanta —Dzh. A. Galstyan, A. M. Zverev, V. V. Mameev, and M. A. Martirosyan. **17**(5), 474–5 (Nov. 1973); CPM-7407X1058

Martynov, A. A.—Probabilities of α decay of odd and odd–odd spherical nuclei and superfluidity —A. A. Martynov and S. G. Kadmenskiĭ. **17**(1), 39–41 (Jul. 1973); CPM-7312F0191

Martynov, E. S.—DAMA single-particle distributions —L. L. Jenkovszky, N. A. Kobylinskiĭ, and E. S. Martynov. **18**(5), 573–6 (May 1974); CPM-7409X0683

Maslennikov, B. K.—Measurement of the effective cross section for the fission of the $Cm^{244-248}$ isotopes by neutrons from a fast reactor —E. F. Fomushkin, E. K. Gutnikova, B. K. Maslennikov, and A. M. Korochkin. **17**(1), 12–4 (Jul. 1973); CPM-7312F0164

Matinyan, S. G.—Photoproduction of A_2 mesons at high energies — S. G. Matinyan and Yu. G. Shakhnazaryan. **17**(2), 196–8 (Aug. 1973); CPM-7406X0746

Matveev, V. A.—Multiple production of charged particles in π^-p and π^-n interactions at 40 GeV/c —V. G. Grishin, S. P. Kuleshov, V. A. Matveev, A. N. Sisakyan, and G. Yancso. **17**(6), 667–8 (Dec. 1973); CPM-7408X0473

—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 633–4 (Jun. 1974); CPM-7409X0467

Medvedev, S. Yu.—Asymptotic behavior of the scattering-amplitude phase shift —S. Yu. Medvedev. **18**(4), 478–82 (Apr. 1974); CPM-7409X0414

Melikov, Yu. V.—Lifetime of the compound nucleus U^{239} produced in the $U^{238}+n$ reaction with 1.6–4.3 MeV neutrons —P. E. Vorotnikov, Yu. V. Melikov, Yu. D. Otstavnov, A. F. Tulinov, and N. G. Chechenin. **17**(5), 471–3 (Nov. 1973); CPM-7407X1055

Mel'nikov, V. N.—Investigations of the WKB approximation within the framework of the exponential method —V. A. Kolkunov and V. N. Mel'nikov. **17**(4), 452–7 (Oct. 1973); CPM-7407X0232

Merenkov, N. P.—High-energy behavior of total cross sections for e^+e^- scattering and the Lamb shift —E. A. Kuraev, L. N. Lipatov, and N. P. Merenkov. **18**(5), 554–61 (May 1974); CPM-7409X0664

Meshkovskiĭ, A. G.—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 633–4 (Jun. 1974); CPM-7409X0467

Mestvirishvili, A. N.—The energy spectrum of γ rays produced in the internal target of the 70-BeV proton synchrotron —A. F. Dunaitsev, Yu. I. Ivan'shin, D. B. Kakauridze, I. I. Karpov, A. N. Mestvirishvili, B. A. Morozov, A. I. Saraĭkin, and A. A. Tyapkin. **17**(6), 641–3 (Dec. 1973); CPM-7408X0447

Meyer, J.—Variation of nuclear quadrupole moments due to rotation, calculated with residual ph and pp interactions —J. Meyer and J. Speth. **17**(6), 623–5 (Dec. 1973); CPM-7408X0429

Mihaĭlak, S.—Transition radiation at the angle of total internal reflection of light from the medium —A. P. Kobzev, S. Mihaĭlak, E. Rutkovsky, and I. M. Frank. **18**(4), 446–8 (Apr. 1974); CPM-7409X0382

Mikheev, N. V.—Sign of muon charge asymmetry in the reaction $e^-e^+ \to \mu^-\mu^+$ and models of unified electromagnetic–weak interaction —É. M. Lipmanov and N. V. Mikheev. **18**(2), 199–200 (Feb. 1974); CPM-7407X0081

Mikheev, V. L.—Direct reactions in the interaction of Ne^{22} with Th^{232} —A. G. Artyukh, J. Wilczynski, V. V. Volkov, G. F. Gridnev, and V. L. Mikheev. **17**(6), 586–9 (Dec. 1973); CPM-7408X0392

Miller, V. V.—The charge-exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. **18**(3), 279–80 (Mar. 1974); CPM-7409X0037

Miranskiĭ, V. A.—Statistical and dynamical properties of dual resonances —M. I. Gorenshtein, G. M. Zinov'ev, V. A. Miranskiĭ, B. V. Struminskiĭ, and V. P. Shelest. **18**(5), 577–82 (May 1974); CPM-7409X0687

Mirosidi, G. S.—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 633–4 (Jun. 1974); CPM-7409X0467

Mirsalikhova, F.—Emission of charged particles in capture of negative muons by emulsion nuclei —Yu. A. Batusov, S. A. Bunyatov, L. Vizireva, G. R. Gulkanyan, F. Mirsalikhova, and V. M. Sidorov. **18**(5), 496–8 (May 1974); CPM-7409X0606

Mkrtchyan, G. G.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions $(\pi^-p \to e^+e^-n)$ near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **17**(1), 44–8 (Jul. 1973); CPM-7312F0196

—Measurement of the pion and nucleon form factors at the Timelike four-momentum Transfers $k^2 = 1.7, 2.2$, and $2.9\ F^{-2}$ —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. **18**(1), 53–6 (Jan. 1974); CPM-7405F0267

Moiseev, A. M.—Properties of the proton and pion spectra for high-energy pp and πp interactions —Yu. I. Arestov, A. M. Moiseev, and K. A. Ter-Martirosyan. **17**(5), 574–5 (Nov. 1973); CPM-7407X1158

Mokhsen, M. A.—The 0^+ levels in Xe^{130} —S. A. Bakiev, K. A. Baskova, S. S. Vasil'ev, M. A. Mokhsen, A. A. Sorokin, and T. V. Chugai. **18**(2), 119–21 (Feb. 1974); CPM-7407X0001

Molchatskiĭ, L. S.—Is the K^+–K^0 meson mass difference of pure electromagnetic origin? —L. S. Molchatskiĭ. **18**(3), 295–6 (Mar. 1974); CPM-7409X0053

Moroz, N. S.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskiĭ, and M. I. Yatsuta. **18**(1), 41–4 (Jan. 1974); CPM-7405F0255

Morozov, B. A.—The energy spectrum of γ rays produced in the internal target of the 70-BeV proton synchrotron —A. F. Dunaitsev, Yu. I. Ivan'shin, D. B. Kakauridze, I. I. Karpov, A. N. Mestvirishvili, B. A. Morozov, A. I. Saraĭkin, and A. A. Tyapkin. **17**(6), 641–3 (Dec. 1973); CPM-7408X0447

Morozov, B. V.—Excitation of O^{16} levels by high-energy protons — Yu. M. Goryachev, V. P. Kanavets, I. V. Kirpichnikov, I. I. Levintov, B. V. Morozov, N. A. Nikiforov, and A. S. Starostin. **17**(5), 476–8 (Nov. 1973); CPM-7407X1060

Morozov, L. N.—Variation of mass distribution of Th^{232} fission fragments with neutron energy —S. M. Dubrovina, V. I. Novgorodtseva, L. N. Morozov, V. A. Pchelin, L. V. Chistyakov, V. A. Shigin, and V. M. Shubko. **17**(3), 240–2 (Sep. 1973); CPM-7406X0790

Morozov, V. A.—Probabilities of electromagnetic transitions in La^{132} and La^{133} nuclei —V. A. Morozov, T. M. Muminov, Kh. Fuya, and A. B. Khalikulov. **17**(4), 348–51 (Oct. 1973); CPM-7407X0128

Morozov, V. M.—Two elastic scattering mechanisms in the optical model of the nucleus —V. M. Morozov, Yu. G. Zubov, and N. S. Lebedeva. **17**(4), 381–5 (Oct. 1973); CPM-7407X0161

Mrachkovskiĭ, O. M.—Probability of formation of spontaneously fissioning isomer states following thermal neutron capture by U^{235} and Pu^{239} —G. V. Valskiĭ, O. M. Mrachkovskiĭ, G. A. Petrov, and Yu. S. Pleva. **18**(3), 253–4 (Mar. 1974); CPM-7409X0011

Mukhin, K. I.—π^-p elastic scattering at $p_{\pi^-} = 4.45$ GeV/c —A. A. Kartamyshev, K. I. Mukhin, A. S. Romantseva, M. M. Sulkovskaya, and A. F. Sustavov. **17**(1), 42–3 (Jul. 1973); CPM-7312F0194

Mukhtarov, A. I.—Production of nucleon resonances in inelastic electron–nucleon scattering —A. I. Mukhtarov, F. S. Sadykhov, and O. A. Vasil'ev. **18**(5), 562–4 (May 1974); CPM-7409X0672

Muminov, T. M.—Probabilities of electromagnetic transitions in La^{132} and La^{133} nuclei —V. A. Morozov, T. M. Muminov, Kh. Fuya, and A. B. Khalikulov. 17(4), 348–51 (Oct. 1973); CPM-7407X0128

Munro, John K., Jr.—Distortion effects in equivalent local potentials —Marcel Coz and John K. Munro Jr. 17(4), 368–75 (Oct. 1973); CPM-7407X0148

Mur, V. D.—Quasistationary levels in the lower continuum —V. S. Popov and V. D. Mur. 18(3), 350–6 (Mar. 1974); CPM-7409X0108

Muradyan, E. G.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. 18(4), 420–3 (Apr. 1974); CPM-7409X0356

Murtazaev, Kh.—Real part of the spinless pp–scattering amplitude at zero angle from 0.135 to 1.700 BeV/c —I. V. Amirkhanov, V. M. Bystritskiĭ, L. S. Vertogradov, R. Ya. Zul:karneev, R. Kh. Kutuev, Kh. Murtazaev, V. S. Nadezhdin, and V. I. Satarov. 17(6), 636–7 (Dec. 1973); CPM-7408X0442

Murzin, A. V.—Peculiarities in thermal neutron capture by even–even nuclei in the region $A = 60$–80 —A. V. Murzin. 18(1), 12–4 (Jan. 1974); CPM-7405F0226

—Nature of excited states of Zn^{69}, Ge^{71}, $Se^{77,79,81}$ nuclei produced in capture of thermal neutrons —A. V. Murzin and V. M. Kolomiets. 18(3), 246–9 (Mar. 1974); CPM-7409X0004

N

Nadezhdin, V. S.—The $(\pi^+,2p)$ reaction in Li nuclei at 85 ± 4 MeV —V. S. Nadezhdin, N. I. Petrov, V. I. Satarov, and I. K. Vzorov. 17(6), 590–4 (Dec. 1973); CPM-7408X0396

—Real part of the spinless pp–scattering amplitude at zero angle from 0.135 to 1.700 BeV/c —I. V. Amirkhanov, V. M. Bystritskiĭ, L. S. Vertogradov, R. Ya. Zul:karneev, R. Kh. Kutuev, Kh. Murtazaev, V. S. Nadezhdin, and V. I. Satarov. 17(6), 636–7 (Dec. 1973); CPM-7408X0442

Nadkarnee, D. M.—Production of nuclei in the reactions with Kr and Xe ions —Yu. Ts. Oganesyan, Yu. E. Penionzhkevich, Nguyen Tac Anh, D. M. Nadkarnee, K. A. Gavrilov, Kim De En, and M. Yussonua. 18(4), 377–80 (Apr. 1974); CPM-7409X0313

Nagy, E.—Search for a new vector meson in K_1^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. 18(4), 424–5 (Apr. 1974); CPM-7409X0360

Nakhutin, I. E.—Range and energy loss of Pu^{238} α particles in certain gases —I. E. Nakhutin and N. N. Demidovich. 17(6), 649–53 (Dec. 1973); CPM-7408X0455

—Energy–loss and range straggling of α particles from Pu^{238} in some gases —N. N. Demidovich, I. E. Nakhutin, and V. G. Shatunov. 18(1), 70–3 (Jan. 1974); CPM-7405F0284

Nam, Song Wong—Investigation of the reaction $Si^{28}(He^3, p)P^{30}$ —Yu. V. Nikitenko, G. M. Osetinskiĭ, Song Wong Nam, and M. A. Faruk. 18(5), 492–5 (May 1974); CPM-7409X0602

Narodetskiĭ, I. M.—Accuracy of the pole approximation in the four–particle integral equations —I. M. Narodetskiĭ. 18(1), 35–7 (Jan. 1974); CPM-7405F0249

—Integral equations for four nucleons with account of spin and isospin —I. M. Narodetskiĭ and I. L. Grach. 18(3), 342–9 (Mar. 1974); CPM-7409X0100

Nechet, V. I.—Retardation in elastic photon scattering by hydrogen atoms —Ya. I. Granovskiĭ and V. I. Nechet. 18(2), 197 (Feb. 1974); CPM-7407X0079

Nedopekin, V. G.—Study of the decay of the He^5 nucleus from the ternary fission of U^{235} induced by thermal neutrons —V. N. Andreev, V. G. Nedopekin, and V. I. Rogov. 17(5), 469–70 (Nov. 1973); CPM-7407X1053

—Emission of helium nuclei in the fragment direction following U^{235} fission by thermal neutrons —V. N. Andreev, V. G. Nedopekin, and V. I. Rogov. 18(5), 503–4 (May 1974); CPM-7409X0613

Nefedov, B. B.—Interaction of neutrons of energy 13–17 MeV with lead isotopes —B. A. Benetskiĭ, B. B. Nefedov, I. M. Frank, and I. V. Shtranikh. 17(1), 10–1 (Jul. 1973); CPM-7312F0162

Nelaeva, V. I.—Structure of lower levels of Ni^{59} and role of simple configurations in the de–excitation of the capture state in the reaction $Ni^{58}(n, \gamma)Ni^{59}$ —V. A. Knat'ko, V. I. Nelaeva, and E. A. Rudak. 17(2), 134–6 (Aug. 1973); CPM-7406X0684

Nemashkalo, B. A.—Radiative capture of protons by Zn^{64}, Zn^{66}, and Zn^{68} nuclei —B. A. Nemashkalo, V. E. Storizhko, V. F. Boldyshev, O. I. Ekhichev, A. P. Klyucharev, and A. I. Popov. 17(2), 117–9 (Aug. 1973); CPM-7406X0667

Nemenov, L. L.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^- p \to e^+ e^- n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 17(1), 44–8 (Jul. 1973); CPM-7312F0196

—Measurement of the pion and nucleon form factors at the Timelike four–momentum Transfers $k^2 = 1.7$, 2.2, and 2.9 F^{-2} —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 18(1), 53–6 (Jan. 1974); CPM-7405F0267

Nemirovskiĭ, P. É.—Distribution of particle–hole states —P. É. Nemirovskiĭ and L. G. Manevich. 18(2), 151–6 (Feb. 1974); CPM-7407X0033

Nesterov, M. M.—Dual model without tachyons, having a Virasoro symmetry, and simplest loop diagrams —M. V. Loktionov and M. M. Nesterov. 17(1), 78–83 (Jul. 1973); CPM-7312F0230

Neudachin, V. G.—Investigation of the nodes of the wave functions of the relative motion of the lightest nuclei αd and αt with the aid of the quasielastic knockout form factors and scattering phase shifts —v. P. Korennoĭ, I. V. Kurdyumov, V. G. Neudachin, and Yu. F. Smirnov. 17(4), 391–6 (Oct. 1973); CPM-7407X0171

Nevskiĭ, P. L.—Direct $\mu^+\mu^-$; and $e^+\mu m^-$ pair production in a neutrino beam —V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov, and A. A. Sokolov. 17(4), 420–2 (Oct. 1973); CPM-7407X0200

Nikiforov, N. A.—Excitation of O^{18} levels by high–energy protons —Yu. M. Goryachev, V. P. Kanavets, I. V. Kirpichnikov, I. I. Levintov, B. V. Morozov, N. A. Nikiforov, and A. S. Starostin. 17(5), 476–8 (Nov. 1973); CPM-7407X1060

Nikitenko, Yu. V.—Investigation of the reaction $Si^{28}(He^3, p)P^{30}$ —Yu. V. Nikitenko, G. M. Osetinskiĭ, Song Wong Nam, and M. A. Faruk. 18(5), 492–5 (May 1974); CPM-7409X0602

Nikitin, V. A.—Determination of the deuteron form factor from the experimental data on elastic pd, pp, and np small–angle scattering in the energy range 10–26 GeV —L. S. Zolin, V. A. Nikitin, Truong Bien, and M. G. Shafranova. 18(1), 30–2 (Jan. 1974); CPM-7405F0244

—Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. 18(2), 179–81 (Feb. 1974); CPM-7407X0061

Nikitin, Yu. P.—Direct $\mu^+\mu^-$; and $e^+\mu m^-$ pair production in a neutrino beam —V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov, and A. A. Sokolov. 17(4), 420–2 (Oct. 1973); CPM-7407X0200

—Quark parton model and a possibility of detecting the W boson in high–energy nucleon–nucleon collisions —Yu. A. Golubkov, A. A. Ivanilov, Yu. P. Nikitin, and G. V. Rozhnov. 18(2), 203–7 (Feb. 1974); CPM-7407X0085

Nikitiu, F.—Possibility of determining the π–He^3H^3 coupling —O. V. Dumbrais, F. Nikitiu, and Yu. A. Shcherbakov. 18(2), 168–70 (Feb. 1974); CPM-7407X0050

Nikolaev, N. N.—Weak–interaction effects in inclusive reactions at high energies —N. N. Nikolaev. 17(1), 62–5 (Jul. 1973); CPM-7312F0214

—Cross sections of inelastic weak processes in lepton–lepton colliding beams —E. B. Bogomol'nyĭ, N. N. Nikolaev, and V. A. Novikov. 17(4), 425–7 (Oct. 1973); CPM-7407X0205

Nikolaevskiĭ, E. S.—The charge–exchange reaction $K^- p \to \bar{K}^0 n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Nilov, A. F.—f^0–meson production in the reaction $\pi^- p \to p\pi^+\pi^-\pi^-$ at a momentum 4.5 GeV/c —G. K. Kliger, V. Z. Kolganov, V. T. Smolyankin, and A. F. Nilov. 17(3), 286–8 (Sep. 1973); CPM-7406X0836

Nomofilov, A. A.—Elastic π^-He^4 small-angle scattering at 3.48 and 6.13 GeV/c —A. A. Nomofilov, I. M. Sitnik, L. A. Slepets, and L. N. Strunov. **18**(2), 187–9 (Feb. 1974); CPM-7407X0069

Novak, M.—Search for a new vector meson in K_1^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. **18**(4), 424–5 (Apr. 1974); CPM-7409X0360

Novgorodtseva, V. I.—Variation of mass distribution of Th^{232} fission fragments with neutron energy —S. M. Dubrovina, V. I. Novgorodtseva, L. N. Morozov, V. A. Pchelin, L. V. Chistyakov, V. A. Shigin, and V. M. Shubko. **17**(3), 240–2 (Sep. 1973); CPM-7406X0790

Novikov, L. S.—Investigation of the coherent process $\pi^- \to \pi^- \pi^0$ at 3.3 GeV/c momentum on the xenon nucleus —I. I. Vorob'ev, L. S. Novikov, and N. N. Shishov. **17**(3), 281–2 (Sep. 1973); CPM-7406X0831

—Determination of the number of effective nucleons in carbon and xenon nuclei in the study of πN interactions —I. I. Vorob'ev, G. S. Veselovskiĭ, L. S. Novikov, and N. N. Shishov. **17**(3), 283–5 (Sep. 1973); CPM-7406X0833

—Search for CP violation in $\bar{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. **18**(6), 633–4 (Jun. 1974); CPM-7409X0467

Novikov, V. A.—Cross sections of inelastic weak processes in lepton–lepton colliding beams —E. B. Bogomol'nyĭ, N. N. Nikolaev, and V. A. Novikov. **17**(4), 425–7 (Oct. 1973); CPM-7407X0205

Novitskiĭ, V. V.—T-invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. **18**(1), 6–9 (Jan. 1974); CPM-7405F0220

O

Obrant, G. Z.—Isospin analysis of inelastic pion–nucleon scattering in the energy interval 300–500 MeV —M. M. Makarov, G. Z. Obrant, and V. V. Sarantsev. **17**(1), 88–91 (Jul. 1973); CPM-7312F0240

Obukhov, A. I.—Cross section and angular anisotropy of fission of U^{238}, Bi^{209}, $Pb^{208-206}$, and Au^{197} by 70–200 MeV protons —V. S. Bychenkov, M. F. Lomanov, A. I. Obukhov, N. A. Perfilov, O. E. Shigaev, G. G. Shimchuk, and R. M. Yakovlev. **17**(5), 496–7 (Nov. 1973); CPM-7407X1080

Obukhovskiĭ, I. T.—Relation between the K-harmonic method and the method of generator coordinates —I. T. Obukhovskiĭ, Yu. F. Smirnov, V. N. Tolstoĭ, K. V. Shitikova, and F. El-Batununi. **17**(4), 386–90 (Oct. 1973); CPM-7407X0166

Oganesyan, Yu. Ts.—Prompt neutrons in the spontaneous fission of Cf^{246} —M. Dakovskiĭ, Yu. A. Lazarev, Yu. Ts. Oganesyan, and G. V. Buklanov. **17**(4), 360–1 (Oct. 1973); CPM-7407X0140

—Prompt-neutron multiplicity in spontaneous fission —D. M. Dakovskiĭ, Yu. A. Lazarev, and Yu. Ts. Oganesyan. **18**(4), 371–6 (Apr. 1974); CPM-7409X0307

—Production of nuclei in the reactions with Kr and Xe ions —Yu. Ts. Oganesyan, Yu. E. Penionzhkevich, Nguyen Tac Anh, D. M. Nadkarnee, K. A. Gavrilov, Kim De En, and M. Yussonua. **18**(4), 377–80 (Apr. 1974); CPM-7409X0313

Ogievetskiĭ, V. I.—Possible spin effects in pp scattering at high energies and the $X^0(960)$ meson —A. Buyak, A. N. Zaslavskiĭ[1], V. I. Ogievetskiĭ, and A. T. Filippov. **18**(4), 462–4 (Apr. 1974); CPM-7409X0398

Ogurtsov, V. I.—Inelastic electromagnetic form factors of K^{39} and Ca^{40} —V. G. Vlasenko, N. G. Afanas'ev, V. A. Gol'dshteĭn, S. V. Dementiĭ, E. L. Kuplennikov, V. I. Ogurtsov, and V. I. Startsev. **17**(6), 585 (Dec. 1973); CPM-7408X0391

—Study of quasielastic high energy electron scattering on light nuclei —E. L. Kuplennikov, N. G. Afanas'ev, V. A. Gol'dshteĭn, V. I. Ogurtsov, and V. G. Vlasenko. **18**(1), 10–1 (Jan. 1974); CPM-7405F0224

Okolovich, V. N.—Fragment characteristics in fission of the compound nucleus U^{236} induced by neutrons and α particles —A. F. Pavlov, V. N. Okolovich, P. P. D'yachenko, and B. D. Kuz'minov. **17**(6), 595–7 (Dec. 1973); CPM-7408X0401

Okorokov, V. V.—Neutron polarization in the reaction Be^9 (α, n)C^{12} —V. V. Okorokov, V. M. Serezhin, V. A. Smotryaev, D. L. Tolchenkov, I. S. Trostin, and Yu. N. Cheblukov. **17**(4), 352–3 (Oct. 1973); CPM-7407X0132

Okun', L. B.—The introduction of additional gauge fields into the Weinberg model —A. D. Dolgov, V. I. Zakharov, and L. B. Okun'. **18**(4), 452–9 (Apr. 1974); CPM-7409X0388

Oleinichak, J.—Muon component of an extensive air shower near the shower axis —N. P. Il'ina, N. N. Kalmykov, J. Oleinichak, B. A. Khrenov, G. B. Khristiansen, and Z. V. Yarochkina. **18**(1), 62–9 (Jan. 1974); CPM-7405F0276

Omelyanenko, A. A.—Search for a spontaneously fissioning isomer nucleus U^{236m} in the reaction U^{235}(n, γ) —Zen Chang Bom, A. Laitay, A. A. Omelyanenko, Ts. Ts. Panteleev, S. M. Polikanov, Yu. V. Ryabov, and Tang San Khak. **18**(1), 18–9 (Jan. 1974); CPM-7405F0232

Oratovskiĭ, Yu. A.—T-invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. **18**(1), 6–9 (Jan. 1974); CPM-7405F0220

Orlov, Yu. V.—Coupling constant in the peripheral model for the reaction (d, p) with allowance for the vertex form factor —Yu. V. Orlov. **18**(3), 357–8 (Mar. 1974); CPM-7409X0115

—Peripheral-model analysis of (p,d) reactions with allowance for the nuclear form factor —Yu. V. Orlov. **18**(5), 529–31 (May 1974); CPM-7409X0639

Osadchiev, V. M.—Effect of the Δ resonance on the properties of nuclear matter —V. M. Osadchiev and M. A. Troitskiĭ. **18**(3), 258–61 (Mar. 1974); CPM-7409X0016

Osetinskiĭ, G. M.—Investigation of the reaction Si^{28}(He^3, p)P^{30} —Yu. V. Nikitenko, G. M. Osetinskiĭ, Song Wong Nam, and M. A. Faruk. **18**(5), 492–5 (May 1974); CPM-7409X0602

Osipenko, B. P.—π^+-meson double charge exchange on Bi^{209} nuclei —Yu. A. Batusov, Z. Ganzorig, I. V. Dudova, B. P. Osipenko, V. M. Sidorov, V. A. Khalkin, and D. Chultėm. **18**(3), 250–2 (Mar. 1974); CPM-7409X0008

Ostapchuk, A. Ya.—Approximate allowance for absorptive corrections to binary hadronic reactions and the Coulomb photoproduction —I. V. Andreev and A. Ya. Ostapchuk. **18**(1), 95–8 (Jan. 1974); CPM-7405F0309

Ots, I.—Spin effects in the production of quasinuclear mesons by a pole mechanism —I. Ots. **17**(5), 561–2 (Nov. 1973); CPM-7407X1145

Otstavnov, Yu. D.—Lifetime of the compound nucleus U^{239} produced in the U^{238}+n reaction with 1.6–4.3 MeV neutrons —P. E. Vorotnikov, Yu. V. Melikov, Yu. D. Otstavnov, A. F. Tulinov, and N. G. Chechenin. **17**(5), 471–3 (Nov. 1973); CPM-7407X1055

Ovchinnikov, O. N.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. **17**(1), 6–9 (Jul. 1973); CPM-7312F0158

Ovsyannikova, R. E.—Back scattering of α particles by C^{12} and C^{13} —B. I. Kuznetsov, I. P. Chernov, and R. E. Ovsyannikova. **18**(5), 490–1 (May 1974); CPM-7409X0600

P

Panteleev, Ts. Ts.—Interaction of polarized resonant neutrons with oriented nuclei —V. P. Alfimenkov, V. N. Bfimov, Ts. Ts. Panteleev, and Yu. I. Fenin. **17**(2), 149–52 (Aug. 1973); CPM-7406X0699

—Search for a spontaneously fissioning isomer nucleus U^{236m} in the reaction U^{235}(n, γ) —Zen Chang Bom, A. Laitay, A. A. Omelyanenko, Ts. Ts. Panteleev, S. M. Polikanov, Yu. V. Ryabov, and Tang San Khak. **18**(1), 18–9 (Jan. 1974); CPM-7405F0232

Pashnev, A. I.—Vacuum state in dual models —D. V. Volkov, A. A. Zheltukhin, and A. I. Pashnev. **18**(4), 467–72 (Apr. 1974); CPM-7409X0403

Pathak, K.—Certain characteristics of decays produced in emulsion nuclei by 70 GeV/c protons —G. S. Deka, K. Pathak, and H. K. Sarma. **17**(3), 341–2 (Sep. 1973); CPM-7406X0891

Pavlov, A. F.—Fragment characteristics in fission of the compound nucleus U^{236} induced by neutrons and α particles —A. F. Pavlov, V. N. Okolovich, P. P. D'yachenko, and B. D. Kuz'minov. **17**(6), 595–7 (Dec. 1973); CPM-7408X0401

Pavlov, V. S.—T-invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. **18**(1), 6–9 (Jan. 1974); CPM-7405F0220

Pchelin, V. A.—Variation of mass distribution of Th^{232} fission fragments with neutron energy —S. M. Dubrovina, V. I. Novgorodtseva, L. N. Morozov, V. A. Pchelin, L. V. Chistyakov, V. A. Shigin, and V. M. Shubko. **17**(3), 240–2 (Sep. 1973); CPM-7406X0790

Penionzhkevich, Yu. E.—Production of nuclei in the reactions with Kr and Xe ions —Yu. Ts. Oganesyan, Yu. E. Penionzhkevich, Nguyen Tac Anh, D. M. Nadkarnee, K. A. Gavrilov, Kim De En, and M. Yussonua. **18**(4), 377–80 (Apr. 1974); CPM-7409X0313

Peresypkin, V. V.—Effect of the finite πN–interaction radius on the πd–scattering length —N. M. Petrov and V. V. Peresypkin. **18**(4), 407–8 (Apr. 1974); CPM-7409X0343

Perfilov, N. A.—Isotope effect in nuclear reactions with high-energy particles —V. I. Bogatin, V. K. Bondarev, V. F. Litvin, O. V. Lozhkin, N. A. Perfilov, and Yu. P. Yakovlev. **17**(1), 4–5 (Jul. 1973); CPM-7312F0156

—Cross section and angular anisotropy of fission of U^{238}, Bi^{209}, $Pb^{208-206}$, and Au^{197} by 70–200 MeV protons —V. S. Bychenkov, M. F. Lomanov, A. I. Obukhov, N. A. Perfilov, O. E. Shigaev, G. G. Shimchuk, and R. M. Yakovlev. **17**(5), 496–7 (Nov. 1973); CPM-7407X1080

Perlovskiĭ, L. L.—Backward πN scattering and the possible existence of an elementary nucleon —I. F. Ginzburg and L. I. Perlovskiĭ. **17**(6), 675–6 (Dec. 1973); CPM-7408X0481

Permyakov, V. P.—Effects of dynamic deformation in the interaction of complex nuclei —V. P. Permyakov. **18**(1), 26–9 (Jan. 1974); CPM-7405F0240

Peterkop, R. K.—Monotonic dependence of the K–matrix on the potential in Kohn's variational method —R. K. Peterkop. **17**(4), 458–60 (Oct. 1973); CPM-7407X0238

Petrauskas, A. K.—Calculation of the properties of low-lying levels taking multiquantum excitations into account —A. K. Petrauskas, G. P. Kamuntavičius, and K. I. Jankauskas. **17**(3), 266–8 (Sep. 1973); CPM-7406X0816

Petrov, G. A.—Spontaneously fissioning isomer U^{238m} excited by capture of thermal neutrons —L. A. Popeko, G. A. Petrov, E. F. Kochubeĭ, and T. K. Zvezdkina. **17**(2), 120–3 (Aug. 1973); CPM-7406X0670

—Probability of formation of spontaneously fissioning isomer states following thermal neutron capture by U^{235} and Pu^{239} —G. V. Valskiĭ, O. M. Mrachkovskiĭ, G. A. Petrov, and Yu. S. Pleva. **18**(3), 253–4 (Mar. 1974); CPM-7409X0011

Petrov, I. P.—An investigation of three–particle decays of Li^6 —K. P. Artemov, V. Z. Gol'dberg, I. P. Petrov, V. P. Rudakov, I. N. Serikov, and V. A. Timofeev. **17**(2), 115–6 (Aug. 1973); CPM-7406X0665

Petrov, L. A.—Measurement of coincidences between positrons and delayed protons for Te^{109} —D. D. Bogdanov, V. A. Karnaukhov, and L. A Petrov. **17**(3), 233–5 (Sep. 1973); CPM-7406X0783

—Fine structure of delayed proton spectrum —V. A. Karnaukhov, D. D. Bogdanov, and L. A. Petrov. **17**(5), 465–8 (Nov. 1973); CPM-7407X1049

—Delayed protons from Te^{109} and the β–decay strength function —D. D. Bogdanov, V. A. Karnaukhov, and L. A. Petrov. **18**(1), 1–5 (Jan. 1974); CPM-7405F0215

Petrov, N. I.—The $(\pi^+,2p)$ reaction in Li nuclei at 85 ± 4 MeV —V. S. Nadezhdin, N. I. Petrov, V. I. Satarov, and I. K. Vzorov. **17**(6), 590–4 (Dec. 1973); CPM-7408X0396

Petrov, N. M.—Effect of the finite πN–interaction radius on the πd–scattering length —N. M. Petrov and V. V. Peresypkin. **18**(4), 407–8 (Apr. 1974); CPM-7409X0343

Petrukhin, A. I.—Differences between the total cross sections at momenta up to 65 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. **17**(2), 157–65 (Aug. 1973); CPM-7406X0707

—Nuclear absorption cross sections for pions, kaons, protons, and antiprotons in the momentum range 6–60 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, R. N. Krasnokutskiĭ, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. **18**(2), 173–8 (Feb. 1974); CPM-7407X0055

Petrukhin, V. N.—The charge–exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. **18**(3), 279–80 (Mar. 1974); CPM-7409X0037

Pikel'ner, L. B.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. **17**(1), 6–9 (Jul. 1973); CPM-7312F0158

Piliposyan, S. E.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. **18**(4), 420–3 (Apr. 1974); CPM-7409X0356

Pleva, Yu. S.—Probability of formation of spontaneously fissioning isomer states following thermal neutron capture by U^{235} and Pu^{239} —G. V. Valskiĭ, O. M. Mrachkovskiĭ, G. A. Petrov, and Yu. S. Pleva. **18**(3), 253–4 (Mar. 1974); CPM-7409X0011

Pligin, Yu. S.—The charge–exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. **18**(3), 279–80 (Mar. 1974); CPM-7409X0037

Podgoretskiĭ, M. I.—Multiple production and interference of particles emitted by moving sources —G. I. Kopylov and M. I. Podgoretskiĭ. **18**(3), 336–41 (Mar. 1974); CPM-7409X0094

Polikanov, S. M.—Search for a spontaneously fissioning isomer nucleus U^{236m} in the reaction $U^{235}(n, \gamma)$ —Zen Chang Bom, A. Laitay, A. A. Omelyanenko, Ts. Ts. Panteleev, S. M. Polikanov, Yu. V. Ryabov, and Tang San Khak. **18**(1), 18–9 (Jan. 1974); CPM-7405F0232

Polischuk, V. N.—Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. **18**(2), 128–30 (Feb. 1974); CPM-7407X0010

Polishchuk, V. N.—Excitation of level complexes in Si^{28} by electron inelastic scattering —I. I. Chkalov, N. G. Shevchenko, N. G. Afanas'ev, I. I. Zalyubovskiĭ, A. A. Khomich, V. N. Polishchuk, A. S. Litvinenko, and A. Yu. Buki. **18**(5), 487–9 (May 1974); CPM-7409X0597

Ponomarev, L. A.—Regge parametrization of the $\pi\pi$ scattering amplitudes. description of the reaction $\pi^-p \to \pi^-\pi^+n$ by the OPER model —K. G. Boreskov, A. B. Kaidalov, and L. A. Ponomarev. **17**(6), 669–74 (Dec. 1973); CPM-7408X0475

—The charge–exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. **18**(3), 279–80 (Mar. 1974); CPM-7409X0037

Popeko, L. A.—Spontaneously fissioning isomer U^{238m} excited by capture of thermal neutrons —L. A. Popeko, G. A. Petrov, E. F. Kochubeĭ, and T. K. Zvezdkina. **17**(2), 120–3 (Aug. 1973); CPM-7406X0670

Popescu, I.—Angular $\gamma\gamma$–correlations in In^{115} —T. Badica, A. Gelberg, S. Dima, I. Popescu, and C. Chortea. **17**(4), 345–7 (Oct. 1973); CPM-7407X0125

Popov, A. I.—Radiative capture of protons by Zn^{64}, Zn^{66}, and Zn^{68} nuclei —B. A. Nemashkalo, V. E. Storizhko, V. F. Boldyshev, O. I. Ekhichev, A. P. Klyucharev, and A. I. Popov. **17**(2), 117–9 (Aug. 1973); CPM-7406X0667

Popov, V. S.—Critical charge for colliding nuclei —V. S. Popov. 17 (3), 322–8 (Sep. 1973); CPM-7406X0872
—Quasistationary levels in the lower continuum —V. S. Popov and V. D. Mur. 18(3), 350–6 (Mar. 1974); CPM-7409X0108
Popushoĭ, M. N.—Approximating the S matrix by means of rational functions —V. V. Malyarov and M. N. Popushoĭ. 18(5), 586–8 (May 1974); CPM-7409X0696
Postoev, V. E.—An investigation of $K^-p \to \bar{K}^0n$ charge exchange at 25 and 35 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, V. E. Postoev, Yu. D. Prokoshkin, and V. K. Semenov. 18(5), 546–50 (May 1974); CPM-7409X0656
Potapov, Yu. V.—Secondary particles produced in interactions of multiply-charged relativistic nuclei with emulsion nuclei —V. E. Dudkin, Yu. V. Potapov, Z. S. Khokhlova, N. S. Shimanskaya, and R. M. Yakovlev. 18(2), 193–4 (Feb. 1974); CPM-7407X0075
Prokeš, A.—Search for a new vector meson in K_L^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. 18(4), 424–5 (Apr. 1974); CPM-7409X0360
Prokhorov, A. N.—Measurement of the $K^-p \to \bar{K}^0n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. 17(6), 638–40 (Dec. 1973); CPM-7408X0444
Prokoshkin, Yu. D.—Differences between the total cross sections at momenta up to 65 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. 17(2), 157–65 (Aug. 1973); CPM-7406X0707
—Measurement of the $K^-p \to \bar{K}^0n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. 17(6), 638–40 (Dec. 1973); CPM-7408X0444
—Nuclear absorption cross sections for pions, kaons, protons, and antiprotons in the momentum range 6–60 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, R. N. Krasnokutskiĭ, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. 18(2), 173–8 (Feb. 1974); CPM-7407X0055
—Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. 18(5), 538–45 (May 1974); CPM-7409X0648
—An investigation of $K^-p \to \bar{K}^0n$ charge exchange at 25 and 35 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, V. E. Postoev, Yu. D. Prokoshkin, and V. K. Semenov. 18(5), 546–50 (May 1974); CPM-7409X0656
—The reaction $\pi^-p \to \eta^0n$ in the momentum region up to 50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, Yu. D. Prokoshkin, E. A. Razuvaev, and V. K. Semenov. 18(6), 648–51 (Jun. 1974); CPM-7409X0482
Protasov, V. P.—Coherent generation of the system $2\pi^-\pi^+$ on nuclei —A. D. Vasil'kova, M. G. Gornov, V. G. Kirillov-Ugryumov, V. P. Protasov, and F. M. Sergeev. 17(2), 166–70 (Aug. 1973); CPM-7406X0716
—The incoherent process $\pi^- + A \to 2\pi^-\pi^+ + A^*$. reaction with quasifree neutrons in the nucleus —V. P. Protasov and F. M. Sergeev. 17(5), 484–8 (Nov. 1973); CPM-7407X1068
—Analysis of the reaction $\pi^-N(A) \to 2\pi^-\pi^+N(A)$ in momentum space —A. D. Vasil'kova, M. G. Gornov, V. I. Levina, V. P. Protasov, and F. M. Sergeev. 18(2), 190–2 (Feb. 1974); CPM-7407X0072
Protogenov, A. P.—The possible existence of a finite charge in quantum field theory —G. M. Avdeeva, A. A. Belavin, and A. P. Protogenov. 18(6), 671–4 (Jun. 1974); CPM-7409X0505
Pustyl'nik, Zh. P.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^-p \to e^+e^-n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 17(1), 44–8 (Jul. 1973); CPM-7312F0196
—Measurement of the pion and nucleon form factors at the Timelike four-momentum Transfers $k^2 = 1.7$, 2.2, and 2.9 F^{-2} —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 18(1), 53–6 (Jan. 1974); CPM-7405F0267
Pyatov, N. I.—Effect of the Coriolis force on E1 transitions between rotational bands —M. I. Baznat and N. I. Pyatov. 18(4), 391–4 (Apr. 1974); CPM-7409X0327
Pyzh, Y. M.—Leptonic production of scalar W meson at ultrahigh energies —V. M. Pyzh. 17(5), 555–7 (Nov. 1973); CPM-7407X1139

R

Rabin, N. V.—Inelastic interactions and proton stripping for 9.4-GeV/c deuterons in emulsion —A. O. Vaĭsenberg, E. D. Kolganova, and N. V. Rabin. 18(6), 635–8 (Jun. 1974); CPM-7409X0469
Rabinovich, A. D.—Fission of U^{233} and U^{235} by thermal neutrons —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(4), 364–8 (Apr. 1974); CPM-7409X0300
—Spontaneous fission of Cf^{252} —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(6), 589–93 (Jun. 1974); CPM-7409X0423
Radkevich, I. A.—Study of the backward ρ^- meson production in the reaction $\pi^-p \to pp^-$ in the primary-momentum range 1.80–3.25 GeV/c —V. V. Vladimirskiĭ, R. I. Dzhelyadin, I. A. Dukhovskoi, V. V. Kishkurno, A. P. Krutenkova, V. V. Kulikov, I. A. Radkevich, and V. S. Fedorets. 17(4), 411–2 (Oct. 1973); CPM-7407X0191
Radomanov, V. B.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskiĭ, and M. I. Yatsuta. 18(1), 41–4 (Jan. 1974); CPM-7405F0255
Radutskiĭ, G. M.—Electroproduction of pions on nucleons in the model of current algebra with hard pions —G. M. Radutskiĭ and V. A. Serdyutskiĭ. 17(5), 540–4 (Nov. 1973); CPM-7407X1124
Ramzhin, V. N.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskiĭ, and M. I. Yatsuta. 18(1), 41–4 (Jan. 1974); CPM-7405F0255
Razuvaev, E. A.—Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. 18(5), 538–45 (May 1974); CPM-7409X0648
—The reaction $\pi^-p \to \eta^0n$ in the momentum region up to 50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, Yu. D. Prokoshkin, E. A. Razuvaev, and V. K. Semenov. 18(6), 648–51 (Jun. 1974); CPM-7409X0482
Reznik, V. R.—An investigation of the fission of U^{238} and Bi^{209} by 1-GeV protons —A. A. Kotov, G. G. Semenchuk, B. A. Bochagov, B. L. Gorshkov, G. G. Kovshevnyĭ, V. R. Reznik, and G. E. Solyakin. 17(5), 498–501 (Nov. 1973); CPM-7407X1082
Roganov, V. S.—Determination of the probability of the (μ^-, $\nu 2n$) reaction resulting from μ^- capture in sulfur and calcium —V. S. Evseev and V. S. Roganov. 17(5), 528–30 (Nov. 1973); CPM-7407X1112
Rogov, V. I.—Study of the decay of the He^3 nucleus from the ternary fission of U^{235} induced by thermal neutrons —V. N. Andreev, V. G. Nedopekin, and V. I. Rogov. 17(5), 469–70 (Nov. 1973); CPM-7407X1053
—Emission of helium nuclei in the fragment direction following U^{235} fission by thermal neutrons —V. N. Andreev, V. G. Nedopekin, and V. I. Rogov. 18(5), 503–4 (May 1974); CPM-7409X0613
Roinishvili, V.—Elastic π^-p, K^-p, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. 18(2), 182–6 (Feb. 1974); CPM-7407X0064
Roizen, I. I.—Multiperipheral theory of the interaction of hadrons at high energies: the $\pi\pi$ interaction —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roizen, and D. S. Chernavskiĭ. 17(2), 208–15 (Aug. 1973); CPM-7406X0758

—Multiperipheral theory of particle interaction at high energies. πN and NN interactions —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roĭzen, and D. S. Chernavskiĭ. 18(2), 226–9 (Feb. 1974); CPM-7407X0108

Romanova, T. S.—On the $\pi^0 \to e + \bar{e}$ decay —T. S. Romanova and I. S. Satsunkevich. 18(2), 198 (Feb. 1974); CPM-7407X0080

Romantseva, A. S.—π^-–p elastic scattering at p_{π^-}=4.45 GeV/c —A. A. Kartamyshev, K. I. Mukhin, A. S. Romantseva, M. M. Sulkovskaya, and A. F. Sustavov. 17(1), 42–3 (Jul. 1973); CPM-7312F0194

Roshchupkin, S. N.—Effect of exchange forces on the sum rule for electron scattering by nuclei —E. V. Inopin and S. N. Roshchupkin. 17(5), 526–7 (Nov. 1973); CPM-7407X1110

Rozanova, A. M.—Energy spectra and polarization of protons from the reaction pd → ppn at 600 MeV —B. M. Golovin, G. I. Lykasov, A. M. Rozanova, and F. Sh. Khamraev. 18(2), 171–2 (Feb. 1974); CPM-7407X0053

Rozhnov, G. V.—Direct $\mu^+\mu^-$ and $e^+\mu^-$ pair production in a neutrino beam —V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov, and A. A. Sokolov. 17(4), 420–2 (Oct. 1973); CPM-7407X0200

—Quark parton model and a possibility of detecting the W boson in high-energy nucleon–nucleon collisions —Yu. A. Golubkov, A. A. Ivanilov, Yu. P. Nikitin, and G. V. Rozhnov. 18(2), 203–7 (Feb. 1974); CPM-7407X0085

Rubashkin, A. L.—Determination of the degree of polarization of coherent bremsstrahlung from a diamond single crystal —V. G. Gorbenko, L. M. Derkach, Yu. V. Zhebrovskiĭ, L. Ya. Kolesnikov, and A. L. Rubashkin. 17(4), 413–6 (Oct. 1973); CPM-7407X0193

Rudak, E. A.—Structure of lower levels of Ni^{59} and role of simple configurations in the de-excitation of the capture state in the reaction $Ni^{58}(n, \gamma)Ni^{59}$ —V. A. Knat'ko, V. I. Nelaeva, and E. A. Rudak. 17(2), 134–6 (Aug. 1973); CPM-7406X0684

Rudakov, V. P.—An investigation of three-particle decays of Li^8 —K. P. Artemov, V. Z. Gol'dberg, I. P. Petrov, V. P. Rudakov, I. N. Serikov, and V. A. Timofeev. 17(2), 115–6 (Aug. 1973); CPM-7406X0665

Rumyantsev, I. A.—Baryon resonances of the quasi–nuclear type — O. D. Dal'karov, B. O. Kerbikov, I. A. Rumyantsev, and I. S. Shapiro. 17(6), 688–92 (Dec. 1973); CPM-7408X0494

Rusakov, S. V.—Study of electron–photon showers in lead in the 150–550 MeV energy region —A. S. Belousov, E. I. Malinovskiĭ, S. V. Rusakov, V. V. Samedov, and P. N. Shareiko. 17(5), 537–9 (Nov. 1973); CPM-7407X1121

Rutkovsky, E.—Transition radiation at the angle of total internal reflection of light from the medium —A. P. Kobzev, S. Mihaliak, E. Rutkovsky, and I. M. Frank. 18(4), 446–8 (Apr. 1974); CPM-7409X0382

Ryabov, Yu. V.—Search for a spontaneously fissioning isomer nucleus U^{236m} in the reaction $U^{235}(n, \gamma)$ —Zen Chang Bom, A. Laitay, A. A. Omelyanenko, Ts. Ts. Panteleev, S. M. Polikanov, Yu. V. Ryabov, and Tang San Khak. 18(1), 18–9 (Jan. 1974); CPM-7405F0232

Ryazanov, D. K.—Fission of U^{233} and U^{235} by thermal neutrons —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(4), 364–8 (Apr. 1974); CPM-7409X0300

—Spontaneous fission of Cf^{252} —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(6), 589–93 (Jun. 1974); CPM-7409X0423

Ryazhskaya, O. G.—Investigation of the depth–intensity curve of the nuclear events induced by cosmic-ray muons —L. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, O. G. Ryazhskaya, and L. N. Stepanets. 17(1), 51–3 (Jul. 1973); CPM-7312F0203

Rybakov, V. G.—Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kaksuridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. 18(5), 538–45 (May 1974); CPM-7409X0648

Ryskin, M. G.—The possibility of a constant total cross section in multiperipheral models —E. M. Levin and M. G. Ryskin. 17(2), 199–207 (Aug. 1973); CPM-7406X0749

—Asymptotic behavior of the cross section with T = 1 in the multiperipheral model —E. M. Levin and M. G. Ryskin. 18(2), 223–5 (Feb. 1974); CPM-7407X0105

—Production of particles with large transverse momenta in the pionization region —E. M. Levin and M. G. Ryskin. 18(5), 570–2 (May 1974); CPM-7409X0680

S

Sabo, V. Ya.—Scalar and pseudoscalar mesons in broken nonlinear chiral SU(3) ⊗SU(3) dynamics —Yu. M. Il'in and V. Ya. Sabo. 18 (2), 238–40 (Feb. 1974); CPM-7407X0120

Sadovoĭ, A. A.—Distribution of nuclear matter —I. K. Aver'yanov, A. A. Sadovoĭ, N. M. Chulkov, and L. L. Vakhlamova. 17(2), 132–3 (Aug. 1973); CPM-7406X0682

Sadykhov, F. S.—Production of nucleon resonances in inelastic electron–nucleon scattering —A. I. Mukhtarov, F. S. Sadykhov, and O. A. Vasil'ev. 18(5), 562–4 (May 1974); CPM-7409X0672

Safro, M. G.—Pomeranchuk cuts in the dual resonance model and total cross sections at high energies —L. V. Laperashvili and M. G. Safro. 17(2), 216–20 (Aug. 1973); CPM-7406X0766

Salamatin, I. M.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. 17 (1), 6–9 (Jul. 1973); CPM-7312F0158

Salganik, Yu. A.—Neutron polarization in nuclear μ^- capture —Yu. A. Salganik and R. A. Éramzhyan. 17(2), 137–8 (Aug. 1973); CPM-7406X0687

Sal'nikov, O. A.—Direct processes in the inelastic scattering of 14.4–MeV neutrons by Nb and Co nuclei —O. A. Sal'nikov, E. M. Saprykin, G. V. Kotel'nikova, G. N. Lovchikova, A. A. Luk'yanov, and N. I. Fetisov. 17(5), 523–5 (Nov. 1973); CPM-7407X1107

Samedov, V. V.—Study of electron–photon showers in lead in the 150–550 MeV energy region —A. S. Belousov, E. I. Malinovskiĭ, S. V. Rusakov, V. V. Samedov, and P. N. Shareiko. 17(5), 537–9 (Nov. 1973); CPM-7407X1121

Samoĭlov, V. M.—Spectrum of gamma quanta produced from the annihilation of stopped $\bar{p}$ in hydrogen —O. D. Dal'karov, V. M. Samoĭlov, and I. S. Shapiro. 17(5), 566–8 (Nov. 1973); CPM-7407X1150

Sanko, L. A.—Analysis of reactions pp → NN2π and pp → NN3π at the incident proton momentum 19.1 GeV/c —Zh. S. Takibaev, É. G. Boos, L. A. Sanko, K. G. Zaĭtsev, and K. P. Sharapov. 18 (1), 49–52 (Jan. 1974); CPM-7405F0263

Saprykin, E. M.—Direct processes in the inelastic scattering of 14.4–MeV neutrons by Nb and Co nuclei —O. A. Sal'nikov, E. M. Saprykin, G. V. Kotel'nikova, G. N. Lovchikova, A. A. Luk'yanov, and N. I. Fetisov. 17(5), 523–5 (Nov. 1973); CPM-7407X1107

Saraĭkin, A. I.—The energy spectrum of γ rays produced in the internal target of the 70–BeV proton synchrotron —A. F. Dunaĭtsev, Yu. I. Ivan'shin, D. B. Kakauridze, I. I. Karpov, A. N. Mestvirishvili, B. A. Morozov, A. I. Saraĭkin, and A. A. Tyapkin. 17(6), 641–3 (Dec. 1973); CPM-7408X0447

Sarantsev, V. V.—Isospin analysis of inelastic pion–nucleon scattering in the energy interval 300–500 MeV —M. M. Makarov, G. Z. Obrant, and V. V. Sarantsev. 17(1), 88–91 (Jul. 1973); CPM-7312F0240

Sard, R. D.—Elastic π^-p, K$^-$p, and $\bar{p}$p scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. 18(2), 182–6 (Feb. 1974); CPM-7407X0064

Sarma, H. K.—Certain characteristics of decays produced in emulsion nuclei by 70 GeV/c protons —G. S. Deka, K. Pathak, and H. K. Sarma. 17(3), 341–2 (Sep. 1973); CPM-7406X0891

Satarov, V. I.—The $(\pi^+, 2p)$ reaction in Li nuclei at 85±4 MeV —V. S. Nadezhdin, N. I. Petrov, V. I. Satarov, and I. K. Vzorov. 17(6), 590–4 (Dec. 1973); CPM-7408X0396

—Real part of the spinless pp–scattering amplitude at zero angle from 0.135 to 1.700 BeV/c —I. V. Amirkhanov, V. M. Bystritskiĭ, L. S. Vertogradov, R. Ya. Zul'karneev, R. Kh. Kutuev, Kh. Murtazaev, V. S. Nadezhdin, and V. I. Satarov. 17(6), 636–7 (Dec. 1973); CPM-7408X0442

Satsunkevich, I. S.—On the $\pi^0 \to e + \bar{e}$ decay —T. S. Romanova and I. S. Satsunkevich. 18(2), 198 (Feb. 1974); CPM-7407X0080

Savel'ev, A. E.—Applicability of the quasiparticle excitation model in the vicinity of the saddle point of the fissionable nucleus —A. E. Savel'ev, V. Kh. Khoruzhiĭ, and S. V. Zhikareva. 17(5), 502–6 (Nov. 1973); CPM-7407X1086

Savin, I. A.—Search for a new vector meson in K_1^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. 18(4), 424–5 (Apr. 1974); CPM-7409X0360

Savitskiĭ, G. A.—Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. P. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. **18**(2), 128–30 (Feb. 1974); CPM-7407X0010

Savrin, V. I.—Spin effects in elastic scattering at angles near 180° — A. A. Arkhipov, V. K. Belov, and V. I. Savrin. **17**(5), 579–82 (Nov. 1973); CPM-7407X1163

Schulz, H.—One-nucleon transfer reactions to quasi-intersecting levels 1/2+ [660] and 1/2+[400], 3/2+[651] and 3/2+[402] —F. A. Gareev, M. Baznat, H. J. Wiebicke, and H. Schulz. **17**(4), 397–401 (Oct. 1973); CPM-7407X0177

—Approximate methods for the solution of the three–nucleon problem at positive energies —V. B. Belyaev, V. N. Efimov, E. G. Tkachenko[1], and H. Schulz. **18**(4), 401–4 (Apr. 1974); CPM-7409X0337

Sel'tser, Sh. Z.—Some physical consequences of a nonlocal quantum theory of weak interaction —V. A. Alebastrov, G. V. Efimov, and Sh. Z. Sel'tser. **18**(1), 109–13 (Jan. 1974); CPM-7405F0323

Semenchuk, G. G.—An investigation of the fission of U^{238} and Bi^{209} by 1–GeV protons —A. A. Kotov, G. G. Semenchuk, B. A. Bochagov, B. L. Gorshkov, G. G. Kovshevnyĭ, V. R. Reznik, and G. E. Solyakin. **17**(5), 498–501 (Nov. 1973); CPM-7407X1082

Semenko, S. F.—Giant dipole resonance in nuclei of the transitional region around A ~ 190 —A. M. Goryachev, G. N. Zalesnyĭ, S. F. Semenko, and B. A. Tulupov. **17**(3), 236–9 (Sep. 1973); CPM-7406X0786

Semenov, V. K.—Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. **18**(5), 538–45 (May 1974); CPM-7409X0648

—An investigation of $K^-p \to \bar{K}^0n$ charge exchange at 25 and 35 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, V. E. Postoev, Yu. D. Prokoshkin, and V. K. Semenov. **18**(5), 546–50 (May 1974); CPM-7409X0656

—The reaction $\pi^- p \to \eta^0 n$ in the momentum region up to 50 GeV/c — V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Kut'in, Yu. D. Prokoshkin, E. A. Razuvaev, and V. K. Semenov. **18**(6), 648–51 (Jun. 1974); CPM-7409X0482

Sen'ko, V. A.—Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. **18**(5), 538–45 (May 1974); CPM-7409X0648

Senyushkin, V. B.—Allowance of multiple scattering in scattering and photoproduction of pions on deuterons —V. B. Senyushkin. **18**(3), 270–5 (Mar. 1974); CPM-7409X0028

Serdyutskiĭ, V. A.—Electroproduction of pions on nucleons in the model of current algebra with hard pions —G. M. Radutskiĭ and V. A. Serdyutskiĭ. **17**(5), 540–4 (Nov. 1973); CPM-7407X1124

Serebryakov, V. V.—ρ dominance and bootstrap of the ππ system — A. N. Vall, V. S. Dedushev, and V. V. Serebryakov. **17**(1), 66–9 (Jul. 1973); CPM-7312F0218

Seregin, A. A.—Properties of Sm^{150} in the phenomenological collective model —A. P. Budnik and A. A. Seregin. **18**(3), 255–7 (Mar. 1974); CPM-7409X0013

Serezhin, V. M.—Neutron polarization in the reaction Be^9 (α, n)C^{12} —V. V. Okorokov, V. M. Serezhin, V. A. Smotryaev, D. L. Tolchenkov, I. S. Trostin, and Yu. N. Cheblukov. **17**(4), 352–3 (Oct. 1973); CPM-7407X0132

Sergachev, A. I.—Yields and kinetic energies of fragments from spontaneous and induced fission of Pu^{242} —N. P. D'yachenko, V. N. Kabenin, N. P. Kolosov, B. D. Kuz'minov, and A. I. Sergachev. **17**(4), 362–5 (Oct. 1973); CPM-7407X0142

Sergeev, F. M.—Coherent generation of the system $2\pi^-\pi^+$ on nuclei —A. D. Vasil'kova, M. G. Gornov, V. G. Kirillov–Ugryumov, V. P. Protasov, and F. M. Sergeev. **17**(2), 166–70 (Aug. 1973); CPM-7406X0716

—The incoherent process $\pi^- + A \to 2\pi^-\pi^+ + A^*$ reaction with quasifree neutrons in the nucleus —V. P. Protasov and F. M. Sergeev. **17**(5), 484–8 (Nov. 1973); CPM-7407X1068

—Analysis of the reaction $\pi^- N(A) \to 2\pi^-\pi^+ N(A)$ in momentum space —A. D. Vasil'kova, M. G. Gornov, V. I. Levina, V. P. Protasov, and F. M. Sergeev. **18**(2), 190–2 (Feb. 1974); CPM-7407X0072

Sergeev, V. A.—Measurement of the $K^-p \to \bar{K}^0n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. **17**(6), 638–40 (Dec. 1973); CPM-7408X0444

Sergeev, V. O.—EO transition in Pd^{106} —E. P. Grigoriev, A. V. Zolotavin, and V. O. Sergeev. **17**(6), 583–4 (Dec. 1973); CPM-7408X0389

Serikov, I. N.—An investigation of three–particle decays of Li^6 —K. P. Artemov, V. Z. Gol'dberg, I. P. Petrov, V. P. Rudakov, I. N. Serikov, and V. A. Timofeev. **17**(2), 115–6 (Aug. 1973); CPM-7406X0665

Serov, V. I.—Fission of Np^{239} in the reaction Np^{237}(t, pf) —M. F. Andreev, V. V. Gladkov, V. A. Zavgorodniĭ, V. I. Serov, and V. M. Surin. **17**(3), 243–5 (Sep. 1973); CPM-7406X0793

Severin, N. F.—Determination of the form factor for the $\gamma p\Delta^+_{1236}$ vertex at momentum transfers up to 0.4 $(GeV/c)^2$ —Yu. I. Titov, N. F. Severin, and R. V. Akhmerov. **18**(3), 276–8 (Mar. 1974); CPM-7409X0034

Shabalin, E. P.—Intermediate–particle production in the renormalizable theory of the weak interaction —A. É. Asratyan and E. P. Shabalin. **18**(1), 87–9 (Jan. 1974); CPM-7405F0301

Shafranova, M. G.—Determination of the deuteron form factor from the experimental data on elastic pd, pp, and np small–angle scattering in the energy range 10–26 GeV —L. S. Zolin, V. A. Nikitin, Truong Bien, and M. G. Shafranova. **18**(1), 30–2 (Jan. 1974); CPM-7405F0244

—Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. **18**(2), 179–81 (Feb. 1974); CPM-7407X0061

Shakhnazaryan, Yu. G.—Photoproduction of A_2 mesons at high energies —S. G. Matinyan and Yu. G. Shakhnazaryan. **17**(2), 196–8 (Aug. 1973); CPM-7406X0746

Shalabaev, D. A.—Angular correlations of the final particles with the γ quanta in direct nuclear reactions in the forward hemisphere of the angular distributions —N. S. Zelenskaya, A. A. El–Kamhavy, and D. A. Shalabaev. **17**(1), 27–31 (Jul. 1973); CPM-7312F0179

Shapiro, F. L.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. **17**(1), 6–9 (Jul. 1973); CPM-7312F0158

Shapiro, I. S.—Bound quasinuclear states of the system $2N2\bar{N}$ —E. S. Birger, B. O. Kerbikov, N. B. Konyukhova, and I. S. Shapiro. **17**(1), 92–5 (Jul. 1973); CPM-7312F0244

—The nonlinear theory of neutral kaons —I. S. Shapiro. **17**(4), 445–9 (Oct. 1973); CPM-7407X0225

—Spectrum of gamma quanta produced from the annihilation of stopped $\bar{p}$ in hydrogen —O. D. Dal'karov, V. M. Samoĭlov, and I. S. Shapiro. **17**(5), 566–8 (Nov. 1973); CPM-7407X1150

—Baryon resonances of the quasi–nuclear type —O. D. Dal'karov, B. O. Kerbikov, I. A. Rumyantsev, and I. S. Shapiro. **17**(6), 688–92 (Dec. 1973); CPM-7408X0494

Sharapov, E. I.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. **17**(1), 6–9 (Jul. 1973); CPM-7312F0158

Sharapov, K. P.—Analysis of reactions $pp \to NN2\pi$ and $pp \to NN3\pi$ at the incident proton momentum 19.1 GeV/c —Zh. S. Takibaev, É. G. Boos, L. A. Sanko, K. G. Zaĭtsev, and K. P. Sharapov. **18**(1), 49–52 (Jan. 1974); CPM-7405F0263

Shareiko, P. N.—Study of electron–photon showers in lead in the 150–550 MeV energy region —A. S. Belousov, E. I. Malinovskiĭ, S. V. Rusakov, V. V. Samedov, and P. N. Shareiko. **17**(5), 537–9 (Nov. 1973); CPM-7407X1121

Shatunov, V. G.—Energy–loss and range straggling of α particles from Pu^{238} in some gases —N. N. Demidovich, I. E. Nakhutin, and V. G. Shatunov. **18**(1), 70–3 (Jan. 1974); CPM-7405F0284

Shchelkachev, A. V.—Analysis of dispersion relations for pion–nucleon scattering at high energies —L. D. Solov'ev and A. V. Shchelkachev. **17**(4), 437–41 (Oct. 1973); CPM-7407X0217

Shchepkin, M. G.—Influence of intermediate boson on the angular and energy distributions of the muons in the reaction $\nu_\mu + Z \to Z + \nu_\mu + \mu^+ + \mu^-$ —M. G. Shchepkin. 17(1), 59–61 (Jul. 1973); CPM-7312P0211

—The conservation of lepton charge —M. G. Shchepkin. 17(4), 428–32 (Oct. 1973); CPM-7407X0208

—The $\mu \to e + \gamma$ decay in the gribov–Pontecorvo model —M. G. Shchepkin. 18(1), 79–81 (Jan. 1974); CPM-7405F0293

Shcherbakov, Yu. A.—Possibility of determining the π-He^3H^3 coupling —O. V. Dumbrais, F. Nikitiu, and Yu. A. Shcherbakov. 18(2), 168–70 (Feb. 1974); CPM-7407X0050

Shcherbin, Yu. P.—Heavy ρ mesons and the pion electromagnetic form factor —Yu. P. Shcherbin. 17(2), 183–7 (Aug. 1973); CPM-7406X0733

Shebanov, V. A.—Search for CP violation in $\tilde{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\tilde{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 633–4 (Jun. 1974); CPM-7409X0467

Shebeko, A. V.—Calculation of the cross sections for pion photoproduction from atomic nuclei —A. V. Shebeko and N. V. Goncharov. 18(5), 532–7 (May 1974); CPM-7409X0642

Shekhter, V. M.—The average multiplicities of particles in the quark model —V. V. Anisovich, M. N. Kobrinskiĭ, A. K. Likhoded, and V. M. Shekhter. 17(3), 343–4 (Sep. 1973); CPM-7406X0893

—Cancellation of divergences and gauge invariance in the massive Yang–Mills field theory —A. N. Ivanov and V. M. Shekhter. 18 (3), 324–32 (Mar. 1974); CPM-7409X0082

—Is the symmetry of the quark model SU(6) or U(6) ? —V. V. Anisovich and V. M. Shekhter. 18(3), 359–60 (Mar. 1974); CPM-7409X0117

Shelest, V. P.—Statistical and dynamical properties of dual resonances —M. I. Gorenshtein, G. M. Zinov'ev, V. A. Miranskiĭ, B. V. Struminskiĭ, and V. P. Shelest. 18(5), 577–82 (May 1974); CPM-7409X0687

Shepelev, G. I.—Matrix elements of the boost for the reduction O(3,1) O(2,1) O(2) —Ya. A. Smorodinskiĭ and G. I. Shepelev. 18 (4), 483–6 (Apr. 1974); CPM-7409X0419

Shestoperov, V. Ya.—Possible behavior of the inelastic cross section of the nucleon interaction with air nuclei at energies higher than 30 GeV —V. V. Akimov, V. E. Koziov, and V. Ya. Shestoperov. 17(5), 535–6 (Nov. 1973); CPM-7407X1119

Shevchenko, N. G.—Electron scattering by $Zn^{66,68}$ —A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, V. D. Afanas'ev, A. Yu. Buki, V. F. Likhachev, V. N. Polischuk, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, and I. I. Chkalov. 18(2), 128–30 (Feb. 1974); CPM-7407X0010

—Excitation of level complexes in Si^{28} by electron inelastic scattering —I. I. Chkalov, N. G. Shevchenko, N. G. Afanas'ev, I. I. Zalyubovskiĭ, A. A. Khomich, V. N. Polishchuk, A. S. Litvinenko, and A. Yu. Buki. 18(5), 487–9 (May 1974); CPM-7409X0597

Shevchenko, V. A.—The nature of Ho^{165} excited states —V. M. Simonenko, S. P. Sitko, and V. A. Shevchenko. 18(3), 243–5 (Mar. 1974); CPM-7409X0001

Shifman, M. A.—Anomalous interactions of muons and heavy μ-Mesic atoms —V. I. Zakharov and M. A. Shifman. 18(1), 84–6 (Jan. 1974); CPM-7405F0298

Shigaev, O. E.—Cross section and angular anisotropy of fission of U^{238}, Bi^{209}, $Pb^{208-206}$, and Au^{197} by 70–200 MeV protons —V. S. Bychenkov, M. F. Lomanov, A. I. Obukhov, N. A. Perfilov, O. E. Shigaev, G. G. Shimchuk, and R. M. Yakovlev. 17(5), 496–7 (Nov. 1973); CPM-7407X1080

Shigin, V. A.—Variation of mass distribution of Th^{232} fission fragments with neutron energy —S. M. Dubrovina, V. I. Novgorodtseva, L. N. Morozov, V. A. Pchelin, L. V. Chistyakov, V. A. Shigin, and V. M. Shubko. 17(3), 240–2 (Sep. 1973); CPM-7406X0790

Shimanskaya, N. S.—Secondary particles produced in interactions of multiply-charged relativistic nuclei with emulsion nuclei —V. E. Dudkin, Yu. V. Potapov, Z. S. Khokhlova, N. S. Shimanskaya, and R. M. Yakovlev. 18(2), 193–4 (Feb. 1974); CPM-7407X0075

Shimchuk, G. G.—Cross section and angular anisotropy of fission of U^{238}, Bi^{209}, $Pb^{208-206}$, and Au^{197} by 70–200 MeV protons —V. S. Bychenkov, M. F. Lomanov, A. I. Obukhov, N. A. Perfilov, O. E. Shigaev, G. G. Shimchuk, and R. M. Yakovlev. 17(5), 496–7 (Nov. 1973); CPM-7407X1080

Shishov, N. N.—Investigation of the coherent process $\pi^- \to \pi^- \pi^0$ at 3.3 GeV/c momentum on the xenon nucleus —I. I. Vorob'ev, L. S. Novikov, and N. N. Shishov. 17(3), 281–2 (Sep. 1973); CPM-7406X0831

—Determination of the number of effective nucleons in carbon and xenon nuclei in the study of πN interactions —I. I. Vorob'ev, G. S. Veselovskiĭ, L. S. Novikov, and N. N. Shishov. 17(3), 283–5 (Sep. 1973); CPM-7406X0833

—Search for CP violation in $\tilde{K}^0 \to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\tilde{K}_S \to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 633–4 (Jun. 1974); CPM-7409X0467

Shitikova, K. V.—Relation between the K-harmonic method and the method of generator coordinates —I. T. Obukhovskiĭ, Yu. F. Smirnov, V. N. Tolstoĭ, K. V. Shitikova, and F. El-Batununi. 17 (4), 386–90 (Oct. 1973); CPM-7407X0166

—Description of nuclear anomalous parity states in the K-harmonics method —M. V. Zhukov, M. I. Zhurina, and K. V. Shitikova. 17 (6), 620–2 (Dec. 1973); CPM-7408X0426

Shkurenko, Yu. P.—The charge-exchange reaction $K^- p \to \tilde{K}^0 n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Sholkhet, V. Kh.—Sum rules for inclusive cross sections and correlation function with account of multipomeron exchanges —V. Kh. Sholkhet. 18(3), 302–7 (Mar. 1974); CPM-7409X0060

Shtranikh, I. V.—Interaction of neutrons of energy 13–17 MeV with lead isotopes —B. A. Benetskiĭ, B. B. Nefedov, I. M. Frank, and I. V. Shtranikh. 17(1), 10–1 (Jul. 1973); CPM-7312F0162

Shubin, Yu. N.—Angular and energy distributions of neutrons scattered inelastically by Fe and Ni nuclei —G. Ya. Tertychnyĭ and Yu. N. Shubin. 17(2), 146–8 (Aug. 1973); CPM-7406X0696

—Level density of light even-even nuclei in a wide range of excitation energies —A. V. Ignatyuk, Yu. V. Sokolov, and Yu. N. Shubin. 18 (5), 510–4 (May 1974); CPM-7409X0620

Shubitidze, N. I.—Transformation coefficients in the hyperspherical approach to the nonequal mass four-body problem —R. I. Dzhibuti, V. Yu. Tomchinskiĭ, and N. I. Shubitidze. 18(6), 597–600 (Jun. 1974); CPM-7409X0431

Shubko, V. M.—Variation of mass distribution of Th^{232} fission fragments with neutron energy —S. M. Dubrovina, V. I. Novgorodtseva, L. N. Morozov, V. A. Pchelin, L. V. Chistyakov, V. A. Shigin, and V. M. Shubko. 17(3), 240–2 (Sep. 1973); CPM-7406X0790

Shumeiko, N. M.—The $\pi^- p \to n l^+ l^-$ process near the Δ (1236) resonance —G. I. Smirnov and N. M. Shumeiko. 17(6), 659–63 (Dec. 1973); CPM-7408X0465

Shuryak, É. V.—Correlations of identical pions in multiple production reactions —É. V. Shuryak. 18(6), 667–70 (Jun. 1974); CPM-7409X0501

Sidorov, V. M.—Inelastic $\pi^+ p$ interactions at energy 230 MeV —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, and V. M. Sidorov. 18(1), 45–8 (Jan. 1974); CPM-7405F0259

—Absorption of stopped π^- mesons by nitrogen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 131–4 (Feb. 1974); CPM-7407X0013

—Absorption of stopped π^- mesons by oxygen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 135–7 (Feb. 1974); CPM-7407X0017

—π^+-meson double charge exchange on Bi^{209} nuclei —Yu. A. Batusov, Z. Ganzorig, I. V. Dudova, B. P. Osipenko, V. M. Sidorov, V. A. Khalkin, and D. Chultém. 18(3), 250–2 (Mar. 1974); CPM-7409X0008

—The reaction $\pi^- p \to \pi^+ \pi^- n$ near threshold —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, V. S. Kurbatov, V. M. Sidorov, and V. A. Yarba. 18(4), 426–9 (Apr. 1974); CPM-7409X0362

—Emission of charged particles in capture of negative muons by emulsion nuclei —Yu. A. Batusov, S. A. Bunyatov, L. Vizireva, G. R. Gulkanyan, F. Mirsalikhova, and V. M. Sidorov. 18(5), 496–8 (May 1974); CPM-7409X0606

Simonenko, V. M.—The nature of Ho^{165} excited states —V. M. Simonenko, S. P. Sitko, and V. A. Shevchenko. 18(3), 243–5 (Mar. 1974); CPM-7409X0001

Simonov, A. Ya.—A method of calculating the properties of spherical even–even nuclei —M. A. Troitskiĭ and A. Ya. Simonov. 17(6), 609–13 (Dec. 1973); CPM-7408X0415

Simonov, Yu. A.—Asymptotic behavior of the wave function for three particles —A. M. Badalyan and Yu. A. Simonov. 17(2), 225–31 (Aug. 1973); CPM-7406X0775

—Equations for three-particle resonance wave function —Yu. A. Simonov and A. M. Badalyan. 18(1), 38–40 (Jan. 1974); CPM-7405F0252

Simonov, Yu. N.—Measurement of the $K^- p \to \bar{K}^0 n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. 17(6), 638–40 (Dec. 1973); CPM-7408X0444

Sirotkin, S. M.—The charge-exchange reaction $K^- p \to \bar{K}^0 n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Sirunyan, A. M.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. 18(4), 420–3 (Apr. 1974); CPM-7409X0356

Sisakyan, A. N.—Multiple production of charged particles in $\pi^- p$ and $\pi^- n$ interactions at 40 GeV/c —V. G. Grishin, S. P. Kuleshov, V. A. Matveev, A. N. Sisakyan, and G. Yancso. 17(6), 667–8 (Dec. 1973); CPM-7408X0473

Sitenko, A. G.—The theory of diffraction scattering —A. G. Sitenko and I. S. Dotsenko. 17(1), 35–8 (Jul. 1973); CPM-7312P0187

Sitko, S. P.—The nature of Ho^{165} excited states —V. M. Simonenko, S. P. Sitko, and V. A. Shevchenko. 18(3), 243–5 (Mar. 1974); CPM-7409X0001

Sitnik, I. M.—Elastic $\pi^- He^4$ small-angle scattering at 3.48 and 6.13 GeV/c —A. A. Nomofilov, I. M. Sitnik, L. A. Slepets, and L. N. Strunov. 18(2), 187–9 (Feb. 1974); CPM-7407X0069

Skobelev, V. V.—ABFST model for the inclusive reactions $ee \to ee + X$ and $ee \to e\nu + X$ —V. V. Skobelev. 17(6), 654–8 (Dec. 1973); CPM-7408X0460

Slepets, L. A.—Elastic $\pi^- He^4$ small-angle scattering at 3.48 and 6.13 GeV/c —A. A. Nomofilov, I. M. Sitnik, L. A. Slepets, and L. N. Strunov. 18(2), 187–9 (Feb. 1974); CPM-7407X0069

Smirnov, G. I.—Measurement of the differential cross sections of the reaction of inverse electroproduction of pions ($\pi^- p \to e^+ e^- n$) near the Δ (1236) resonance —S. F. Berezhnev, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 17(1), 44–8 (Jul. 1973); CPM-7312F0196

—The $\pi^- p \to n l^+ l^-$ process near the Δ (1236) resonance —G. I. Smirnov and N. M. Shumeiko. 17(6), 659–63 (Dec. 1973); CPM-7408X0465

—Measurement of the pion and nucleon form factors at the Timelike four-momentum Transfers $k^2 = 1.7$, 2.2, and 2.9 F^{-2} —S. F. Berezhnev, A. V. Demyanov, A. V. Kulikov, A. V. Kuptsov, V. P. Kurochkin, G. G. Mkrtchyan, L. L. Nemenov, Zh. P. Pustyl'nik, G. I. Smirnov, A. G. Fedunov, and D. M. Khazins. 18(1), 53–6 (Jan. 1974); CPM-7405F0267

Smirnov, Yu. F.—Relation between the K-harmonic method and the method of generator coordinates —I. T. Obukhovskiĭ, Yu. F. Smirnov, V. N. Tolstoĭ, K. V. Shitikova, and F. El-Batununi. 17(4), 386–90 (Oct. 1973); CPM-7407X0166

—Investigation of the nodes of the wave functions of the relative motion of the lightest nuclei αd and αt with the aid of the quasielastic knockout form factors and scattering phase shifts —V. P. Korennoĭ, I. V. Kurdyumov, V. G. Neudachin, and Yu. F. Smirnov. 17(4), 391–6 (Oct. 1973); CPM-7407X0171

Smirnov, Yu. G.—Internal brehmsstrahlung accompanying electron capture in Cl^{36} —Yu. G. Smirnov and I. S. Batkin. 18(2), 122–4 (Feb. 1974); CPM-7407X0004

Smolyankin, V. T.—δ^0-meson production in the reaction $\pi^- p \to p \pi^+ \pi^- \pi^-$ at a momentum 4.5 GeV/c —G. K. Kliger, V. Z. Kolganov, V. T. Smolyankin, and A. F. Nilov. 17(3), 286–8 (Sep. 1973); CPM-7406X0836

Smorodinskaya, N. Ya.—Theoretical approach to elastic pd scattering at large angles —V. M. Kolybasov and N. Ya. Smorodinskaya. 17(6), 630–5 (Dec. 1973); CPM-7408X0436

Smorodinskiĭ, Ya. A.—Orthogonal transformations of multidimensional angular harmonics —Ya. A. Smorodinskiĭ and V. D. Éfros. 17(1), 107–13 (Jul. 1973); CPM-7312F0259

—Matrix elements of the boost for the reduction O(3,1) O(2,1) O(2) —Ya. A. Smorodinskiĭ and G. I. Shepelev. 18(4), 483–6 (Apr. 1974); CPM-7409X0419

Smotryaev, V. A.—Neutron polarization in the reaction Be^9 (α, n)C^{12} —V. V. Okorokov, V. M. Serezhin, V. A. Smotryaev, D. L. Tolchenkov, I. S. Trostin, and Yu. N. Cheblukov. 17(4), 352–3 (Oct. 1973); CPM-7407X0132

Sokolov, A. A.—Direct $\mu^+\mu^-$ and $e^+\mu^-$ pair production in a neutrino beam —V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov, and A. A. Sokolov. 17(4), 420–2 (Oct. 1973); CPM-7407X0200

Sokolov, Yu. V.—Density of excited particle-hole states in the superfluid nuclear model —A. V. Ignatyuk and Yu. V. Sokolov. 17(4), 376–80 (Oct. 1973); CPM-7407X0156

—Level density of light even–even nuclei in a wide range of excitation energies —A. V. Ignatyuk, Yu. V. Sokolov, and Yu. N. Shubin. 18(5), 510–4 (May 1974); CPM-7409X0620

Sokolovskiĭ, V. V.—The charge-exchange reaction $K^- p \to \bar{K}^0 n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Solov'ev, L. D.—Analysis of dispersion relations for pion–nucleon scattering at high energies —L. D. Solov'ev and A. V. Shchelkachev. 17(4), 437–41 (Oct. 1973); CPM-7407X0217

Solov'ev, S. M.—The spectra of the fission x-rays at different kinetic energies of the light fragment and the "fine" structure of the mass yield —A. G. Donichkin, S. M. Solov'ev, and V. P. Éĭsmont. 17(5), 489–92 (Nov. 1973); CPM-7407X1073

—Time of x-ray emission by fragments fission with definite charged —A. G. Donichkin, S. M. Solov'ev, and V. P. Éĭsmont. 18(2), 138–41 (Feb. 1974); CPM-7407X0020

Solyakin, G. E.—An investigation of the fission of U^{238} and Bi^{209} by 1-GeV protons —A. A. Kotov, G. G. Semenchuk, B. A. Bochagov, B. L. Gorshkov, G. G. Kovshevnyĭ, V. R. Reznik, and G. E. Solyakin. 17(5), 498–501 (Nov. 1973); CPM-7407X1082

—Angular distributions of fragments from fission of nuclei U^{238}, Th^{232}, Bi^{209}, Re^{186} induced by protons with $T_p = 1$ GeV —A. M. Zolotov, B. A. Bochagov, L. N. Andronenko, and G. E. Solyakin. 18(1), 15–7 (Jan. 1974); CPM-7405F0229

—Angular and kinematical correlations of α particles and neutrons from triple fission of Cf^{252} nuclei —A. P. Graevskiĭ and G. E. Solyakin. 18(4), 369–70 (Apr. 1974); CPM-7409X0305

Sorokin, A. A.—The 0^+ levels in Xe^{130} —S. A. Bakiev, K. A. Baskova, S. S. Vasil'ev, M. A. Mokhsen, A. A. Sorokin, and T. V. Chugai. 18(2), 119–21 (Feb. 1974); CPM-7407X0001

Sorokin, Yu. I.—Photoneutron cross sections for W^{182} and W^{184} — Yu. I. Sorokin, V. A. Khrushchev, and B. A. Yur'ev. 17(1), 1–3 (Jul. 1973); CPM-7312F0153

Speth, J.—Variation of nuclear quadrupole moments due to rotation, calculated with residual ph and pp interactions —J. Meyer and J. Speth. 17(6), 623–5 (Dec. 1973); CPM-7408X0429

Starodubskiĭ, V. E.—Effect of nucleon correlations in the reaction $C^{12}(p,2p)B^{11}$ within the framework of the Glauber theory —K. N. Ermakov, M. B. Zhalov, and V. E. Starodubskiĭ. 18(4), 412–5 (Apr. 1974); CPM-7409X0348

Starostin, A. S.—Excitation of O^{16} levels by high-energy protons — Yu. M. Goryachev, V. P. Kanavets, I. V. Kirpichnikov, I. I. Levintov, B. V. Morozov, N. A. Nikiforov, and A. S. Starostin. 17 (5), 476–8 (Nov. 1973); CPM-7407X1060

Startsev, V. I.—Inelastic electromagnetic form factors of K^{39} and Ca^{40} —V. G. Vlasenko, N. G. Afanas'ev, V. A. Gol'dshtein , S. V. Dementiĭ, E. L. Kuplennikov, V. I. Ogurtsov, and V. I. Startsev. 17(6), 585 (Dec. 1973); CPM-7408X0391

Stavinskiĭ, V. S.—The NN and πN interaction radii —V. S. Stavinskiĭ. 17(6), 677–8 (Dec. 1973); CPM-7408X0483

—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskiĭ, and M. I. Yatsuta. 18(1), 41–4 (Jan. 1974); CPM-7405F0255

Stepanets, L. N.—Investigation of the depth–intensity curve of the nuclear events induced by cosmic-ray muons —L. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, O. G. Ryazhskaya, and L. N. Stepanets. 17(1), 51–3 (Jul. 1973); CPM-7312F0203

Stepanov, B. E.—Anharmonic effects in low-lying excitations of spherical nuclei —B. E. Stepanov. 18(5), 515–20 (May 1974); CPM-7409X0625

Stolin, V. L.—Experimental study of the mechanism of the reaction $Li^6(\pi^-, \pi^-p)He^5$ —Yu. D. Bayukov, L. S. Vorob'ev, V. M. Kolybasov, G. A. Leksin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 17(5), 479–83 (Nov. 1973); CPM-7407X1063

—Scaling invariance effects in proton–nucleus backward scattering in the few-GeV energy range—Yu. D. Bayukov, L. S. Vorob'ev, G. A. Lesin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. 18(6), 639–40 (Jun. 1974)

Storizhko, V. E.—Radiative capture of protons by Zn^{64}, Zn^{66}, and Zn^{68} nuclei —B. A. Nemashkalo, V. E. Storizhko, V. F. Boldyshev, O. I. Ekhichev, A. P. Klyucharev, and A. I. Popov. 17(2), 117–9 (Aug. 1973); CPM-7406X0667

Stoyanova, D. A.—Differences between the total cross sections at momenta up to 65 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. 17(2), 157–65 (Aug. 1973); CPM-7406X0707

—Nuclear absorption cross sections for pions, kaons, protons, and antiprotons in the momentum range 6–60 GeV/c —Yu. P. Gorin, S. P. Denisov, S. V. Donskov, R. N. Krasnokutskiĭ, A. I. Petrukhin, Yu. D. Prokoshkin, and D. A. Stoyanova. 18(2), 173–8 (Feb. 1974); CPM-7407X0055

—Shadow corrections with account of inelastic screening and calculation of the total cross sections for pn, p̄n, and K^+n collisions —V. V. Anisovich and D. A. Stoyanova. 18(2), 230–1 (Feb. 1974); CPM-7407X0112

Strikman, M. I.—Identity of final-state electrons in pair production in colliding e^+e^- beams —E. A. Kuraev, L. N. Lipatov, and M. I. Strikman. 18(6), 652–7 (Jun. 1974); CPM-7409X0486

Struminskiĭ, B. V.—Statistical and dynamical properties of dual resonances —M. I. Gorenshteĭn, G. M. Zinov'ev, V. A. Miranskiĭ, B. V. Struminskiĭ, and V. P. Shelest. 18(5), 577–82 (May 1974); CPM-7409X0687

Strunov, L. N.—Elastic π-He^4 small-angle scattering at 3.48 and 6.13 GeV/c —A. A. Nomofilov, I. M. Sitnik, L. A. Slepets, and L. N. Strunov. 18(2), 187–9 (Feb. 1974); CPM-7407X0069

Sugonyaev, V. P.—Measurement of the $K^-p \to \bar{K}^0n$ cross section at 25 BeV/c —V. I. Belousov, Yu. P. Dmitrevskiĭ, Yu. D. Karpekov, V. A. Kachanov, V. F. Konstantinov, V. M. Kut'in, A. A. Lednev, G. P. Makarov, Yu. D. Prokoshkin, A. N. Prokhorov, V. A. Sergeev, Yu. N. Simonov, and V. P. Sugonyaev. 17(6), 638–40 (Dec. 1973); CPM-7408X0444

Suleĭmanov, R. A.—Measurement of the total nucleon inelasticity coefficient in the interaction with iron nuclei —M. O. Azaryan, É. A. Mamidzhanyan, and R. A. Suleĭmanov. 17(3), 291–2 (Sep. 1973); CPM-7406X0841

Sulkovskaya, M. M.—π^-p elastic scattering at $p_{\pi^-}=4.45$ GeV/c —A. A. Kartamyshev, K. I. Mukhin, A. S. Romantseva, M. M. Sulkovskaya, and A. F. Sustavov. 17(1), 42–3 (Jul. 1973); CPM-7312F0194

Surin, V. M.—Fission of Np^{239} in the reaction $Np^{237}(t, pf)$ —M. F. Andreev, V. V. Gladkov, V. A. Zavgorodniĭ, V. I. Serov, and V. M. Surin. 17(3), 243–5 (Sep. 1973); CPM-7406X0793

Sushkov, O. P.—Single muon production in colliding electron–positron beams —O. P. Sushkov and V. V. Flambaum. 18 (1), 82–3 (Jan. 1974); CPM-7405F0296

Sustavov, A. F.—π^-p elastic scattering at $p_{\pi^-}=4.45$ GeV/c —A. A. Kartamyshev, K. I. Mukhin, A. S. Romantseva, M. M. Sulkovskaya, and A. F. Sustavov. 17(1), 42–3 (Jul. 1973); CPM-7312F0194

Sviridov, V. A.—Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. 18(2), 179–81 (Feb. 1974); CPM-7407X0061

T

Takibaev, Zh. S.—Analysis of reactions $pp \to NN2\pi$ and $pp \to NN3\pi$ at the incident proton momentum 19.1 GeV/c —Zh. S. Takibaev, É. G. Boos, L. A. Sanko, K. G. Zaĭtsev, and K. P. Sharapov. 18(1), 49–52 (Jan. 1974); CPM-7405F0263

—Formation of heavy clusters and properties of topological cross sections of proton–proton interactions —Zh. S. Takibaev and P. A. Usik. 18(4), 465–6 (Apr. 1974); CPM-7409X0401

Tarasevich, S. V.—On the analysis of the reaction $\pi^-p \to \pi^0n$ at high energies —Z. R. Babaev, V. S. Zamiralov, and S. V. Tarasevich. 18 (2), 214–6 (Feb. 1974); CPM-7407X0096

Tarasko, M. Z.—New approach to the search for the distribution of delayed-neutron precursors —M. Z. Tarasko and B. P. Maksyutenko. 17(6), 598–601 (Dec. 1973); CPM-7408X0404

Tarasov, A. V.—Spin effects in the theory of pHe^4 scattering —G. I. Lykasov and A. V. Tarasov. 17(2), 153–6 (Aug. 1973); CPM-7406X0703

—Elastic pHe^3 scattering in the Glauber model with spin —G. I. Lykasov and A. V. Tarasov. 18(6), 619–20 (Jun. 1974); CPM-7409X0453

Tarasov, E. K.—The charge-exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Tarkovskiĭ, E. I.—T-invariance in nuclear electromagnetic transitions —M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. 18(1), 6–9 (Jan. 1974); CPM-7405F0220

Tartakovskiĭ, V. K.—Calculation of the cross section of the reaction $He^3(e, e'p)H^2$ by the K-harmonics method. comparison with other calculations —V. K. Tartakovskiĭ and I. V. Kozlovskiĭ. 17(2), 142–5 (Aug. 1973); CPM-7406X0692

—Behavior of the He^3 $(e,e'p)H^2$ cross section at high reaction-fragment relative-motion energies —V. K. Tartakovskiĭ. 18(4), 409–11 (Apr. 1974); CPM-7409X0345

Teplov, I. B.—$\alpha\gamma$ angular correlations in inelastic scattering of α particles —T. A. Dmitrieva, N. S. Zelenskaya, A. A. Elkamhavi, and I. B. Teplov. 18(6), 626–30 (Jun. 1974); CPM-7409X0460

Terent'ev, M. V.—The branching ratio $\Gamma(\pi \to e\nu)/\Gamma(\pi \to \mu\nu)$ with account of electromagnetic corrections and the contribution from strong interactions —M. V. Terent'ev. 18(4), 449–51 (Apr. 1974); CPM-7409X0385

Ter-Martirosyan, K. A.—Elastic πN scattering and backward charge exchange with allowance for the cut contribution —K. G. Boreskov, K. A. Ter-Martirosyan, and I. S. Tsukerman. 17(4), 442–4 (Oct. 1973); CPM-7407X0222

—Properties of the proton and pion spectra for high-energy pp and π p interactions —Yu. I. Arestov, A. M. Moiseev, and K. A. Ter-Martirosyan. 17(5), 574–5 (Nov. 1973); CPM-7407X1158

Tertychnyĭ, G. Ya.—Angular and energy distributions of neutrons scattered inelastically by Fe and Ni nuclei —G. Ya. Tertychnyĭ and Yu. N. Shubin. 17(2), 146–8 (Aug. 1973); CPM-7406X0696

—Spectra and angular distributions of photoprotons from the decay of dipole isobar-analog states —G. Ya. Tertychnyĭ and E. L. Yadrovskiĭ. 18(1), 21–5 (Jan. 1974); CPM-7405F0235

Tikhomirov, G. D.—The charge-exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Timofeev, V. A.—An investigation of three-particle decays of Li^6 — K. P. Artemov, V. Z. Gol'dberg, I. P. Petrov, V. P. Rudakov, I. N. Serikov, and V. A. Timofeev. 17(2), 115–6 (Aug. 1973); CPM-7406X0665

Tishin, V. G.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. 17 (1), 6–9 (Jul. 1973); CPM-7312F0158

Titov, A. I.—Excitation of nuclei by particles of near-barrier energies —V. K. Luk'yanov and A. I. Titov. 18(2), 157–61 (Feb. 1974); CPM-7407X0039

Titov, Yu. I.—Determination of the form factor for the $\gamma p\Delta^+{}_{1236}$ vertex at momentum transfers up to 0.4 $(GeV/c)^2$ —Yu. I. Titov, N. F. Severin, and R. V. Akhmerov. 18(3), 276–8 (Mar. 1974); CPM-7409X0034

Tkachenko, E. G.—Quartet s phase shift for nd scattering below the threshold in the linear approximation in the interaction range —V. N. Efimov and E. G. Tkachenko. 18(1), 33–4 (Jan. 1974); CPM-7405F0247

Tkachenko[1], E. G.—Approximate methods for the solution of the three-nucleon problem at positive energies —V. B. Belyaev, V. N. Efimov, E. G. Tkachenko[1], and H. Schulz. 18(4), 401–4 (Apr. 1974); CPM-7409X0337

Tolchenkov, D. L.—Neutron polarization in the reaction Be^9 $(\alpha, n)C^{12}$ —V. V. Okorokov, V. M. Serezhin, V. A. Smotryaev, D. L. Tolchenkov, I. S. Trostin, and Yu. N. Cheblukov. 17(4), 352–3 (Oct. 1973); CPM-7407X0132

Tolstoĭ, V. N.—Relation between the K-harmonic method and the method of generator coordinates —I. T. Obukhovskiĭ, Yu. F. Smirnov, V. N. Tolstoĭ, K. V. Shitikova, and F. El-Batununi. 17 (4), 386–90 (Oct. 1973); CPM-7407X0166

Tomchinskiĭ, V. Yu.—Transformation coefficients in the hyperspherical approach to the nonequal mass four-body problem —R. I. Dzhibuti, V. Yu. Tomchinskiĭ, and N. I. Shubitidze. 18(6), 597–600 (Jun. 1974); CPM-7409X0431

Tonapetyan, S. G.—Dependence of the yield of pions and protons emitted at $\theta_{lab} = 90°$ at $E_{\gamma}{}^{max} = 400$ MeV on the mass number of the [*] nucleus —N. V. Goncharov, A. I. Derebchinskiĭ, O. G. Konovalov, S. G. Tonapetyan, and V. M. Khovorostyan. 17(2), 124–7 (Aug. 1973); CPM-7406X0674

Toneev, V. D.—Elastic interactions of high-energy helium ions with atomic nuclei —V. S. Barashenkov, K. K. Gudima, F. G. Zheregi, A. S. Il'inov, and V. D. Toneev. 17(2), 221–4 (Aug. 1973); CPM-7406X0771

—Energy dependence of the ratio Γ_n/Γ_f for transuranium elements — V. S. Barashenkov, F. G. Zhereghi, A. S. Il'inov, and V. D. Toneev. 18(1), 20 (Jan. 1974); CPM-7405F0234

Toth, L.—On the complete set of observables on a sphere in the three-dimensional complex space —I. Lukáč and L. Toth. 17(6), 696–700 (Dec. 1973); CPM-7408X0502

Troitskiĭ, M. A.—A method of calculating the properties of spherical even-even nuclei —M. A. Troitskiĭ and A. Ya. Simonov. 17(6), 609–13 (Dec. 1973); CPM-7408X0415

—Effect of the Δ resonance on the properties of nuclear matter —V. M. Osadchiev and M. A. Troitskiĭ. 18(3), 258–61 (Mar. 1974); CPM-7409X0016

Trostin, I. S.—Neutron polarization in the reaction Be^9 $(\alpha, n)C^{12}$ — V. V. Okorokov, V. M. Serezhin, V. A. Smotryaev, D. L. Tolchenkov, I. S. Trostin, and Yu. N. Cheblukov. 17(4), 352–3 (Oct. 1973); CPM-7407X0132

Trostin, S. S.—T-invariance in nuclear electromagnetic transitions — M. I. Bulgakov, A. D. Gul'ko, G. V. Danilyan, I. L. Karpikhin, P. A. Krupchitskiĭ, V. V. Novitskiĭ, Yu. A. Oratovskiĭ, V. S. Pavlov, E. I. Tarkovskiĭ, and S. S. Trostin. 18(1), 6–9 (Jan. 1974); CPM-7405F0220

Trostina, K. A.—The charge-exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Trubkin, Yu. A.—Intensity of cosmic muons at large rock and water depths in ground and their energy spectrum at sea level —Yu. N. Vavilov, Yu. A. Trubkin, and V. M. Fedorov. 18(4), 434–9 (Apr. 1974); CPM-7409X0370

Tsarev, V. A.—The asymptotic amplitude regarded as a result of summing resonances in the crossing channel —V. A. Tsarev. 18(2), 220–2 (Feb. 1974); CPM-7407X0102

Tsinoev, V. G.—Neutrino-induced excitation of nuclei —V. G. Tsinoev and L. N. Zakharov. 18(2), 201–2 (Feb. 1974); CPM-7407X0083

Tsukerman, I. S.—Elastic πN scattering and backward charge exchange with allowance for the cut contribution —K. G. Boreskov, K. A. Ter-Martirosyan, and I. S. Tsukerman. 17(4), 442–4 (Oct. 1973); CPM-7407X0222

Tulinov, A. F.—Lifetime of the compound nucleus U^{239} produced in the $U^{238}+n$ reaction with 1.6–4.3 MeV neutrons —P. E. Vorotnikov, Yu. V. Melikov, Yu. D. Otstavnov, A. F. Tulinov, and N. G. Chechenin. 17(5), 471–3 (Nov. 1973); CPM-7407X1055

Tulinova, Z. I.—Experimental data on extensive air showers at heights 5000–12000 m —R. A. Antonov, I. P. Ivanenko, and Z. I. Tulinova. 18(3), 285–8 (Mar. 1974); CPM-7409X0043

Tulupov, B. A.—Giant dipole resonance in nuclei of the transitional region around A ~ 190 —A. M. Goryachev, G. N. Zalesnyĭ, S. F. Semenko, and B. A. Tulupov. 17(3), 236–9 (Sep. 1973); CPM-7406X0786

Turchanovich, L. K.—The charge-exchange reaction $K^-p \to \bar{K}^0n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. 18(3), 279–80 (Mar. 1974); CPM-7409X0037

Turovtsev, V. V.—Determination of the vertex coupling constants from an analysis of the single-nucleon transfer on the nuclei Mg^{26}, Al^{27}, and Si^{28} —V. V. Turovtsev and R. Yarmukhamedov. 17 (1), 32–4 (Jul. 1973); CPM-7312F0184

Tut'in, V. M.—Scattering of pions by protons with charge exchange in the momentum range 20–50 GeV/c —V. N. Bolotov, V. V. Isakov, D. B. Kakauridze, V. A. Kachanov, V. M. Tut'in, Yu. D. Prokoshkin, E. A. Razuvaev, V. K. Semenov, V. A. Sen'ko, and V. G. Rybakov. 18(5), 538–45 (May 1974); CPM-7409X0648

Tyapin, A. S.—Effect of nuclear surface curvature and Coulomb field on the nucleon distribution —A. S. Tyapin. 17(5), 507–10 (Nov. 1973); CPM-7407X1091

—Penetration of a double-hump potential barrier —A. S. Tyapin and V. E. Marshalkin. 18(2), 142–4 (Feb. 1974); CPM-7407X0024

Tyapkin, A. A.—The energy spectrum of γ rays produced in the internal target of the 70-BeV proton synchrotron —A. F. Dunaĭtsev, Yu. I. Ivan'shin, D. B. Kakauridze, I. I. Karpov, A. N. Mestvirishvili, B. A. Morozov, A. I. Saraĭkin, and A. A. Tyapkin. 17(6), 641–3 (Dec. 1973); CPM-7408X0447

Tyutin, I. V.—The equivalence theorem and gauge invariance in renormalizable theories —R. E. Kallosh and I. V. Tyutin. 17(1), 98–106 (Jul. 1973); CPM-7312F0250

—"Extra" Goldstones in gauge theory with spontaneous breaking —I. V. Tyutin and E. S. Fradkin. 18(1), 114–8 (Jan. 1974); CPM-7405F0328

U

Urban, L.—Search for a new vector meson in $K_L{}^0$ decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. 18(4), 424–5 (Apr. 1974); CPM-7409X0360

Urin, M. G.—Shell-model approach to the description of nucleon-nucleus elastic scattering —D. F. Zaretskiĭ and M. G. Urin. 18(3), 262–6 (Mar. 1974); CPM-7409X0020

Usik, P. A.—Formation of heavy clusters and properties of topological cross sections of proton–proton interactions —Zh. S. Takibaev and P. A. Usik. **18**(4), 465–6 (Apr. 1974); CPM-7409X0401

V

Vaisenberg, A. O.—Inelastic interactions and proton stripping for 9.4–GeV/c deuterons in emulsion —A. O. Vaĭsenberg, E. D. Kolganova, and N. V. Rabin. **18**(6), 635–8 (Jun. 1974); CPM-7409X0469

Vakhlamova, L. L.—Distribution of nuclear matter —I. K. Aver'yanov, A. A. Sadovoĭ, N. M. Chulkov, and L. L. Vakhlamova. **17**(2), 132–3 (Aug. 1973); CPM-7406X0682

Vall, A. N.—ρ dominance and bootstrap of the $\pi\pi$ system —A. N. Vall, V. S. Dedushev, and V. V. Serebryakov. **17**(1), 66–9 (Jul. 1973); CPM-7312F0218

Valskiĭ, G. V.—Probability of formation of spontaneously fissioning isomer states following thermal neutron capture by U^{235} and Pu^{239} —G. V. Valskiĭ, O. M. Mrachkovskiĭ, G. A. Petrov, and Yu. S. Pleva. **18**(3), 253–4 (Mar. 1974); CPM-7409X0011

Vanagas, V. V.—Microscopic analog of the collective Bohr–Mottelson model —V. V. Vanagas and R. K. Kalinauskas. **18**(4), 395–400 (Apr. 1974); CPM-7409X0331

Vartapetyan, G. A.—Photospallation of nuclei in the energy region from 2 to 4.5 BeV —G. A. Vartapetyan, A. S. Danagulyan, N. A. Demëkhina, and A. G. Khudaverdyan. **17**(4), 356–9 (Oct. 1973); CPM-7407X0136

—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. **18**(4), 420–3 (Apr. 1974); CPM-7409X0356

Vasil'ev, O. A.—Production of nucleon resonances in inelastic electron–nucleon scattering —A. I. Mukhtarov, F. S. Sadykhov, and O. A. Vasil'ev. **18**(5), 562–4 (May 1974); CPM-7409X0672

Vasil'ev, S. S.—The 0^+ levels in Xe^{130} —S. A. Bakiev, K. A. Baskova, S. S. Vasil'ev, M. A. Mokhsen, A. A. Sorokin, and T. V. Chugai. **18**(2), 119–21 (Feb. 1974); CPM-7407X0001

Vasil'kova, A. D.—Coherent generation of the system $2\pi^-\pi^+$ on nuclei —A. D. Vasil'kova, M. G. Gornov, V. G. Kirillov–Ugryumov, V. P. Protasov, and F. M. Sergeev. **17**(2), 166–70 (Aug. 1973); CPM-7406X0716

—Analysis of the reaction $\pi^- N(A) \to 2\pi^-\pi^+ N(A)$ in momentum space —A. D. Vasil'kova, M. G. Gornov, V. I. Levina, V. P. Protasov, and F. M. Sergeev. **18**(2), 190–2 (Feb. 1974); CPM-7407X0072

Vat'yan, A. L.—Photoproduction of single η mesons on nuclei at $E_\gamma = 2$ GeV —L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Vat'yan, S. R. Gevorkyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, S. E. Piliposyan, A. M. Sirunyan, A. G. Khudaverdyan, and L. S. Khurshudyan. **18**(4), 420–3 (Apr. 1974); CPM-7409X0356

Vavilov, Yu. N.—Intensity of cosmic muons at large rock and water depths in ground and their energy spectrum at sea level —Yu. N. Vavilov, Yu. A. Trubkin, and V. M. Fedorov. **18**(4), 434–9 (Apr. 1974); CPM-7409X0370

Verdiev, Ĭ. A.—Separation of variables in the Bethe–Salpeter equation in Minkowski space —Ĭ. A. Verdiev. **17**(3), 334–40 (Sep. 1973); CPM-7406X0884

Vertogradov, L. S.—Real part of the spinless pp–scattering amplitude at zero angle from 0.135 to 1.700 BeV/c —L. V. Amirkhanov, V. M. Bystritskiĭ, L. S. Vertogradov, R. Ya. Zul'karneev, R. Kh. Kutuev, Kh. Murtazaev, V. S. Nadezhdin, and V. I. Satarov. **17**(6), 636–7 (Dec. 1973); CPM-7408X0442

Veselovskiĭ, G. S.—Determination of the number of effective nucleons in carbon and xenon nuclei in the study of πN interactions —I. I. Vorob'ev, G. S. Veselovskiĭ, L. S. Novikov, and N. N. Shishov. **17**(3), 283–5 (Sep. 1973); CPM-7406X0833

Vinogradov, B. N.—Concerning the magic numbers of neutron–excess nuclei —B. N. Vinogradov and Yu. P. Elagin. **17**(2), 128–31 (Aug. 1973); CPM-7406X0678

Vizireva, L.—Emission of charged particles in capture of negative muons by emulsion nuclei —Yu. A. Batusov, S. A. Bunyatov, L. Vizireva, G. R. Gulkanyan, F. Mirsalikhova, and V. M. Sidorov. **18**(5), 496–8 (May 1974); CPM-7409X0606

Vladimirskiĭ, V. V.—Study of the backward ρ–meson production in the reaction $\pi^- p \to \rho^- p$ in the primary–momentum range 1.80–3.25 GeV/c —V. V. Vladimirskiĭ, R. I. Dzhelyadin, I. A. Dukhovskoi, V. V. Kishkurno, A. P. Krutenkova, V. V. Kulikov, I. A. Radkevich, and V. S. Fedorets. **17**(4), 411–2 (Oct. 1973); CPM-7407X0191

—The charge–exchange reaction $K^- p \to \bar{K}^0 n$ at 39 GeV/c —O. N. Baloshin, A. M. Blagorodov, B. V. Bolonkin, V. V. Vladimirskiĭ, Yu. P. Gorin, V. K. Grigor'ev, A. P. Grishin, I. A. Erofeev, I. Ya. Korol'kov, V. N. Luzin, V. V. Miller, E. S. Nikolaevskiĭ, V. N. Petrukhin, Yu. S. Pligin, L. A. Ponomarev, S. M. Sirotkin, V. V. Sokolovskiĭ, E. K. Tarasov, G. D. Tikhomirov, K. A. Trostina, L. K. Turchanovich, and Yu. P. Shkurenko. **18**(3), 279–80 (Mar. 1974); CPM-7409X0037

Vlasenko, V. G.—Inelastic electromagnetic form factors of K^{39} and Ca^{40} —V. G. Vlasenko, N. G. Afanas'ev, V. A. Gol'dshtein , S. V. Dementiĭ, E. L. Kuplennikov, V. I. Ogurtsov, and V. I. Startsev. **17**(6), 585 (Dec. 1973); CPM-7408X0391

—Study of quasielastic high energy electron scattering on light nuclei —É. L. Kuplennikov, N. G. Afanas'ev, V. A. Gol'dshtein, V. I. Ogurtsov, and V. G. Vlasenko. **18**(1), 10–1 (Jan. 1974); CPM-7405F0224

Volkov, D. V.—Vacuum state in dual models —D. V. Volkov, A. A. Zheltukhin, and A. I. Pashnev. **18**(4), 467–72 (Apr. 1974); CPM-7409X0403

Volkov, E. I.—Multiperipheral theory of the interaction of hadrons at high energies: the $\pi\pi$ interaction —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roĭzen, and D. S. Chernavskiĭ. **17**(2), 208–15 (Aug. 1973); CPM-7406X0758

—Multiperipheral theory of particle interaction at high energies. πN and NN interactions —E. I. Volkov, I. M. Dremin, A. M. Dunaevskiĭ, I. I. Roĭzen, and D. S. Chernavskiĭ. **18**(2), 226–9 (Feb. 1974); CPM-7407X0108

Volkov, V. V.—Direct reactions in the interaction of Ne^{22} with Th^{232} —A. G. Artyukh, J. Wilczynski, V. V. Volkov, G. F. Gridnev, and V. L. Mikheev. **17**(6), 586–9 (Dec. 1973); CPM-7408X0392

Vorob'ev, I. L.—Investigation of the coherent process $\pi^- \to \pi^- \pi^0$ at 3.3 GeV/c momentum on the xenon nucleus —I. I. Vorob'ev, L. S. Novikov, and N. N. Shishov. **17**(3), 281–2 (Sep. 1973); CPM-7406X0831

—Determination of the number of effective nucleons in carbon and xenon nuclei in the study of πN interactions —I. I. Vorob'ev, G. S. Veselovskiĭ, L. S. Novikov, and N. N. Shishov. **17**(3), 283–5 (Sep. 1973); CPM-7406X0833

Vorob'ev, L. S.—Experimental study of the mechanism of the reaction $Li^6(\pi^-, \pi^- p)He^5$ —Yu. D. Bayukov, L. S. Vorob'ev, V. M. Kolybasov, G. A. Leksin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskiĭ. **17**(5), 479–83 (Nov. 1973); CPM-7407X1063

–Scaling invariance effects in proton-nuclear backward scattering in the few–GeV energy range– Yu. D. Bayukov, L. S. Vorob'ev, G. A. Lesin, V. L. Stolin, V. B. Fedorov, and V. D. Khovanskii. **18**(6), 639–40 (Jun. 1974)

Vorotnikov, P. E.—Lifetime of the compound nucleus U^{239} produced in the $U^{238} + n$ reaction with 1.6–4.3 MeV neutrons —P. E. Vorotnikov, Yu. V. Melikov, Yu. D. Otstavnov, A. F. Tulinov, and N. G. Chechenin. **17**(5), 471–3 (Nov. 1973); CPM-7407X1055

Votruba, J.—Search for a new vector meson in K_L^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. **18**(4), 424–5 (Apr. 1974); CPM-7409X0360

Vovenko, A. S.—Search for a new vector meson in K_L^0 decays —A. S. Vovenko, J. Votruba, J. Hladky, D. Kiss, V. G. Krivokhizhin, M. F. Likhachev, E. Nagy, M. Novak, A. Prokeš, I. A. Savin, and L. Urban. **18**(4), 424–5 (Apr. 1974); CPM-7409X0360

Vzorov, I. K.—The $(\pi^+, 2p)$ reaction in Li nuclei at 85±4 MeV —V. S. Nadezhdin, N. I. Petrov, V. I. Satarov, and I. K. Vzorov. **17**(6), 590–4 (Dec. 1973); CPM-7408X0396

W

Weitsch, A.—Elastic $\pi^- p$, $K^- p$, and $\bar{p}p$ scattering at 25 and 40 GeV/c —Y. M. Antipov, G. Ascoli, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili, and R. D. Sard. **18**(2), 182–6 (Feb. 1974); CPM-7407X0064

Wiebicke, H. J.—One–nucleon transfer reactions to quasi–intersecting levels $1/2^+$ [660] and $1/2^+$[400], $3/2^+$[651] and $3/2^+$[402] —F. A. Gareev, M. Baznat, H. J. Wiebicke, and H. Schulz. **17**(4), 397–401 (Oct. 1973); CPM-7407X0177

Wilczynski, J.—Direct reactions in the interaction of Ne^{22} with Th^{232} —A. G. Artyukh, J. Wilczynski, V. V. Volkov, G. F. Gridnev, and V. L. Mikheev. 17(6), 586–9 (Dec. 1973); CPM-7408X0392

Y

Yadrovskiĭ, E. L.—Spectra and angular distributions of photoprotons from the decay of dipole isobar-analog states —G. Ya. Tertychnyĭ and E. L. Yadrovskiĭ. 18(1), 21–5 (Jan. 1974); CPM-7405F0235

Yakovenko, V. P.—Correspondence between the irregularities of triangle Feynman diagrams and the masses of negative-strangeness baryon resonances —E. I. Dubovoĭ and V. P. Yakovenko. 17(5), 569–73 (Nov. 1973); CPM-7407X1153

Yakovlev, R. M.—Cross section and angular anisotropy of fission of U^{238}, Bi^{209}, $Pb^{208-206}$, and Au^{197} by 70–200 MeV protons —V. S. Bychenkov, M. F. Lomanov, A. I. Obukhov, N. A. Perfilov, O. E. Shigaev, G. G. Shimchuk, and R. M. Yakovlev. 17(5), 496–7 (Nov. 1973); CPM-7407X1080

—Production of neutrons in Pb, Cd, Fe, and Al by high energy muons —G. V. Gorshkov, V. A. Zyabkin, and R. M. Yakovlev. 18(1), 57–61 (Jan. 1974); CPM-7405F0271

—Secondary particles produced in interactions of multiply-charged relativistic nuclei with emulsion nuclei —V. E. Dudkin, Yu. V. Potapov, Z. S. Khokhlova, N. S. Shimanskaya, and R. M. Yakovlev. 18(2), 193–4 (Feb. 1974); CPM-7407X0075

Yakovlev, Yu. P.—Isotope effect in nuclear reactions with high-energy particles —V. I. Bogatin, V. K. Bondarev, V. F. Litvin, O. V. Lozhkin, N. A. Perfilov, and Yu. P. Yakovlev. 17(1), 4–5 (Jul. 1973); CPM-7312F0156

Yancso, G.—Multiple production of charged particles in π^-p and π^-n interactions at 40 GeV/c —V. G. Grishin, S. P. Kuleshov, V. A. Matveev, A. N. Sisakyan, and G. Yancso. 17(6), 667–8 (Dec. 1973); CPM-7408X0473

Yarba, V. A.—Absorption of stopped π^- mesons by nitrogen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 131–4 (Feb. 1974); CPM-7407X0013

—Absorption of stopped π^- mesons by oxygen nuclei with formation of Li^8 —N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, V. I. Genchev, N. F. Golovanova, G. R. Gulkanyan, V. M. Sidorov, Kh. M. Chernev, and V. A. Yarba. 18(2), 135–7 (Feb. 1974); CPM-7407X0017

—The reaction $\pi^-p \to \pi^+\pi^-n$ near threshold —Yu. A. Batusov, S. A. Bunyatov, G. R. Gulkanyan, V. S. Kurbatov, V. M. Sidorov, and V. A. Yarba. 18(4), 426–9 (Apr. 1974); CPM-7409X0362

Yarmukhamedov, R.—Determination of the vertex coupling constants from an analysis of the single-nucleon transfer on the nuclei Mg^{26}, Al^{27}, and Si^{28} —V. V. Turovtsev and R. Yarmukhamedov. 17 (1), 32–4 (Jul. 1973); CPM-7312F0184

Yarochkina, Z. V.—Muon component of an extensive air shower near the shower axis —N. P. Il'ina, N. N. Kalmykov, J. Oleinichak, B. A. Khrenov, G. B. Khristiansen, and Z. V. Yarochkina. 18(1), 62–9 (Jan. 1974); CPM-7405F0276

—Muon contribution to the development of electron-nuclear showers generated by cosmic rays —A. F. Knyazev, V. B. Kosarev, B. A. Khrenov, and Z. V. Yarochkina. 18(4), 430–3 (Apr. 1974); CPM-7409X0366

—Muons in extensive air showers (interaction with matter) —N. P. Il'ina, B. A. Khrenov, and Z. V. Yarochkina. 18(4), 440–5 (Apr. 1974); CPM-7409X0376

Yatsuta, M. I.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskiĭ, and M. I. Yatsuta. 18(1), 41–4 (Jan. 1974); CPM-7405F0255

Yur'ev, B. A.—Photoneutron cross sections for W^{182} and W^{184} —Yu. I. Sorokin, V. A. Khrushchev, and B. A. Yur'ev. 17(1), 1–3 (Jul. 1973); CPM-7312F0153

Yussonua, M.—Production of nuclei in the reactions with Kr and Xe ions —Yu. Ts. Oganesyan, Yu. E. Penionzhkevich, Nguyen Tac Anh, D. M. Nadkarnee, K. A. Gavrilov, Kim De En, and M. Yussonua. 18(4), 377–80 (Apr. 1974); CPM-7409X0313

Z

Zaĭtsev, K. G.—Analysis of reactions $pp \to NN2\pi$ and $pp \to NN3\pi$ at the incident proton momentum 19.1 GeV/c —Zh. S. Takibaev, É. G. Boos, L. A. Sanko, K. G. ZaĭtSEV, and K. P. Sharapov. 18(1), 49–52 (Jan. 1974); CPM-7405F0263

Zakharov, L. N.—Neutrino-induced excitation of nuclei —V. G. Tsinoev and L. N. Zakharov. 18(2), 201–2 (Feb. 1974); CPM-7407X0083

Zakharov, V. I.—Anomalous interactions of muons and heavy μ-Mesic atoms —V. I. Zakharov and M. A. Shifman. 18(1), 84–6 (Jan. 1974); CPM-7405F0298

—The introduction of additional gauge fields into the Weinberg model —A. D. Dolgov, V. I. Zakharov, and L. B. Okun'. 18(4), 452–9 (Apr. 1974); CPM-7409X0388

Zakharova, V. P.—Fission of U^{233} and U^{235} by thermal neutrons —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(4), 364–8 (Apr. 1974); CPM-7409X0300

—Spontaneous fission of Cf^{252} —V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich, and V. A. Korostylev. 18(6), 589–93 (Jun. 1974); CPM-7409X0423

Zalesnyĭ, G. N.—Giant dipole resonance in nuclei of the transitional region around A ~ 190 —A. M. Goryachev, G. N. Zalesnyĭ, S. F. Semenko, and B. A. Tulupov. 17(3), 236–9 (Sep. 1973); CPM-7406X0786

Zalyubovskiĭ, I. I.—Excitation of level complexes in Si^{28} by electron inelastic scattering —I. I. Chkalov, N. G. Shevchenko, N. G. Afanas'ev, I. I. Zalyubovskiĭ, A. A. Khomich, V. N. Polishchuk, A. S. Litvinenko, and A. Yu. Buki. 18(5), 487–9 (May 1974); CPM-7409X0597

Zamiralov, V. S.—Continuous moment sum rules —Z. R. Babaev and V. S. Zamiralov. 17(5), 576–8 (Nov. 1973); CPM-7407X1160

—On the analysis of the reaction $\pi^-p \to \pi^0n$ at high energies —Z. R. Babaev, V. S. Zamiralov, and S. V. Tarasevich. 18(2), 214–6 (Feb. 1974); CPM-7407X0096

Zaretskiĭ, D. F.—Nuclear reactions in muonic atoms —D. F. Zaretskiĭ and V. A. Lyul'ka. 17(2), 139–41 (Aug. 1973); CPM-7406X0689

—Shell-model approach to the description of nucleon-nucleus elastic scattering —D. F. Zaretskiĭ and M. G. Urin. 18(3), 262–6 (Mar. 1974); CPM-7409X0020

Zaslavskiĭ, A. N.—High-energy contributions to the dispersion integrals, the isotensor electromagnetic current and the data on π^* photoproduction from threshold to 450 MeV —I. G. Aznauryan and A. N. Zaslavskiĭ. 17(2), 191–5 (Aug. 1973); CPM-7406X0741

Zaslavskiĭ[1], A. N.—Possible spin effects in pp scattering at high energies and the $X^0(960)$ meson —A. Buyak, A. N. Zaslavskiĭ[1], V. I. Ogievetskiĭ, and A. T. Filippov. 18(4), 462–4 (Apr. 1974); CPM-7409X0398

Zatsepin, G. T.—Investigation of the depth-intensity curve of the nuclear events induced by cosmic-ray muons —L. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, O. G. Ryazhskaya, and L. N. Stepanets. 17(1), 51–3 (Jul. 1973); CPM-7312F0203

Zavgorodniĭ, V. A.—Fission of Np^{239} in the reaction $Np^{237}(t, pf)$ —M. F. Andreev, V. V. Gladkov, V. A. Zavgorodniĭ, V. I. Serov, and V. M. Surin. 17(3), 243–5 (Sep. 1973); CPM-7406X0793

Zayachki, V. Ĭ.—Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. Ĭ. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. 18(2), 179–81 (Feb. 1974); CPM-7407X0061

Zelenskaya, N. S.—Angular correlations of the final particles with the γ quanta in direct nuclear reactions in the forward hemisphere of the angular distributions —N. S. Zelenskaya, A. A. El-Kamhavy, and D. A. Shalabaev. 17(1), 27–31 (Jul. 1973); CPM-7312F0179

—$\alpha\gamma$ angular correlations in inelastic scattering of α particles —T. A. Dmitrieva, N. S. Zelenskaya, A. A. Elkamhavi, and I. B. Teplov. 18(6), 626–30 (Jun. 1974); CPM-7409X0460

Zelevinskiĭ, V. G.—Rotational excitation of nuclei in the method of the generalized density matrix —S. T. Belyaev and V. G. Zelevinskiĭ. 17(3), 269–76 (Sep. 1973); CPM-7406X0819

Zhalov, M. B.—Effect of nucleon correlations in the reaction $C^{12}(p,2p)B^{11}$ within the framework of the Glauber theory —K. N. Ermakov, M. B. Zhalov, and V. E. Starodubskiĭ. 18(4), 412–5 (Apr. 1974); CPM-7409X0348

Zhebrovskiĭ, Yu. V.—Determination of the degree of polarization of coherent bremsstrahlung from a diamond single crystal —V. G. Gorbenko, L. M. Derkach, Yu. V. Zhebrovskiĭ, L. Ya. Kolesnikov, and A. L. Rubashkin. 17(4), 413–6 (Oct. 1973); CPM-7407X0193

Zheleznykh, I. M.—Cross sections of the deep inelastic processes $\nu+p\to l^-+l^++l^-+$ hadrons —E. V. Bugaev, V. I. Gurentsov, G. V. Domogatskiĭ, and I. M. Zheleznykh. 17(5), 558–60 (Nov. 1973); CPM-7407X1142

Zheltukhin, A. A.—Vacuum state in dual models —D. V. Volkov, A. A. Zheltukhin, and A. I. Pashnev. 18(4), 467–72 (Apr. 1974); CPM-7409X0403

Zhereghi, F. G.—Energy dependence of the ratio Γ_n/Γ_f for transuranium elements —V. S. Barashenkov, F. G. Zhereghi, A. S. Il'inov, and V. D. Toneev. 18(1), 20 (Jan. 1974); CPM-7405F0234

Zheregi, F. G.—Elastic interactions of high-energy helium ions with atomic nuclei —V. S. Barashenkov, K. K. Gudima, F. G. Zheregi, A. S. Il'inov, and V. D. Toneev. 17(2), 221–4 (Aug. 1973); CPM-7406X0771

Zhidkov, N. K.—Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. Î. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. 18(2), 179–81 (Feb. 1974); CPM-7407X0061

Zhikareva, S. V.—Applicability of the quasiparticle excitation model in the vicinity of the saddle point of the fissionable nucleus —A. E. Savel'ev, V. Kh. Khoruzhiĭ, and S. V. Zhikareva. 17(5), 502–6 (Nov. 1973); CPM-7407X1086

Zhukov, G. P.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. 17 (1), 6–9 (Jul. 1973); CPM-7312F0158

Zhukov, M. V.—Description of nuclear anomalous parity states in the K–harmonics method —M. V. Zhukov, M. I. Zhurina, and K. V. Shitikova. 17(6), 620–2 (Dec. 1973); CPM-7408X0426

Zhurina, M. I.—Description of nuclear anomalous parity states in the K–harmonics method —M. V. Zhukov, M. I. Zhurina, and K. V. Shitikova. 17(6), 620–2 (Dec. 1973); CPM-7408X0426

Zimin, G. N.—Magnetic moments of the Er^{168} states excited by neutron capture —V. P. Alfimenkov, G. P. Zhukov, G. N. Zimin, L. Lason, Yu. D. Mareev, O. N. Ovchinnikov, L. B. Pikel'ner, I. M. Salamatin, V. G. Tishin, F. L. Shapiro, and E. I. Sharapov. 17 (1), 6–9 (Jul. 1973); CPM-7312F0158

Zinov'ev, G. M.—Statistical and dynamical properties of dual resonances —M. I. Gorenshtein, G. M. Zinov'ev, V. A. Miranskiĭ, B. V. Struminskiĭ, and V. P. Shelest. 18(5), 577–82 (May 1974); CPM-7409X0687

Zlatanov, Z. M.—Elastic pd scattering at 5 GeV in the coulomb–nuclear interference region —Z. M. Zlatanov, L. G. Kristov, and P. A. Devenski. 17(1), 49–50 (Jul. 1973); CPM-7312F0201

Zolin, L. S.—Determination of the deuteron form factor from the experimental data on elastic pd, pp, and np small–angle scattering in the energy range 10–26 GeV —L. S. Zolin, V. A. Nikitin, Truong Bien, and M. G. Shafranova. 18(1), 30–2 (Jan. 1974); CPM-7405F0244

—Slope parameter and real part of the pn elastic scattering amplitude in the energy range 10–70 GeV —G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. Î. Zayachki, L. S. Zolin, L. F. Kirillova, V. A. Nikitin, V. A. Sviridov, Truong Bien, and M. G. Shafranova. 18 (2), 179–81 (Feb. 1974); CPM-7407X0061

Zolotavin, A. V.—EO transition in Pd^{106} —E. P. Grigoriev, A. V. Zolotavin, and V. O. Sergeev. 17(6), 583–4 (Dec. 1973); CPM-7408X0389

Zolotov, A. M.—Angular distributions of fragments from fission of nuclei U^{238}, Th^{232}, Bi^{209}, Re^{186} induced by protons with $T_p = 1$ GeV —A. M. Zolotov, B. A. Bochagov, L. N. Andronenko, and G. E. Solyakin. 18(1), 15–7 (Jan. 1974); CPM-7405F0229

Zombkovskaya, N. K.—Search for CP violation in $\bar{K}^0\to 3\pi^0$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 631–2 (Jun. 1974); CPM-7409X0465

—Search for $\bar{K}_S\to 2\pi$ decay —V. V. Barmin, V. G. Barylov, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, V. A. Matveev, G. S. Mirosidi, A. G. Meshkovskiĭ, L. S. Novikov, T. A. Chistyakova, I. V. Chuvilo, V. A. Shebanov, and N. N. Shishov. 18(6), 633–4 (Jun. 1974); CPM-7409X0467

Zubarev, V. N.—Cumulative mesoproduction —A. M. Baldin, S. B. Gerasimov , H. Guiordenescu, V. N. Zubarev, L. K. Ivanova, A. D. Kirillov, V. A. Kuznetsov, N. S. Moroz, V. B. Radomanov, V. N. Ramzhin, V. S. Stavinskiĭ, and M. I. Yatsuta. 18(1), 41–4 (Jan. 1974); CPM-7405F0255

Zubov, Yu. G.—Two elastic scattering mechanisms in the optical model of the nucleus —V. M. Morozov, Yu. G. Zubov, and N. S. Lebedeva. 17(4), 381–5 (Oct. 1973); CPM-7407X0161

Zul:karneev, R. Ya.—Real part of the spinless pp–scattering amplitude at zero angle from 0.135 to 1.700 BeV/c —I. V. Amirkhanov, V. M. Bystritskiĭ, L. S. Vertogradov, R. Ya. Zul:karneev, R. Kh. Kutuev, Kh. Murtazaev, V. S. Nadezhdin, and V. I. Satarov. 17(6), 636–7 (Dec. 1973); CPM-7408X0442

Zupnik, B. M.—Electromagnetic interaction in SU(3) ×SU(3) symmetry and pseudoscalar meson decays —B. M. Zupnik and E. A. Ivanov. 17(3), 301–6 (Sep. 1973); CPM-7406X0851

Zverev, A. M.—Determination of the cross section of photodisintegration of emulsion nuclei by 1.0–4.5 GeV γ–quanta —Dzh. A. Galstyan, A. M. Zverev, V. V. Mameev, and M. A. Martirosyan. 17(5), 474–5 (Nov. 1973); CPM-7407X1058

Zvezdkina, T. K.—Spontaneously fissioning isomer U^{238m} excited by capture of thermal neutrons —L. A. Popeko, G. A. Petrov, E. F. Kochubei, and T. K. Zvezdkina. 17(2), 120–3 (Aug. 1973); CPM-7406X0670

Zyabkin, V. A.—Production of neutrons in Pb, Cd, Fe, and Al by high energy muons —G. V. Gorshkov, V. A. Zyabkin, and R. M. Yakovlev. 18(1), 57–61 (Jan. 1974); CPM-7405F0271